

ORIENTATION PROGRAMME OF IED TEACHERS FOR THE  
STATE OF BIHAR

Venue :- Patna Collegiate School, Daryapurgola,  
Patna - 800 004

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N C E R T  
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH & TRAINING  
NEW DELHI - 110 016



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(February 10 - 14, 1992 )

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## PREFACE

An Orientation Programme of IED Teachers for the State of Bihar was conducted at Patna Collegiate School, Patna and organized by this College in Collaboration with SCERT, Bihar, Patna. All the teachers engaged in education of disabled children were invited for this programme of 5 days duration (Feb. 10-14, 1992).

The Programme was directed by Dr.S.K.Goel, Reader in Special Education. Besides several lectures and group discussions on all the five disability areas; some demonstration classes, slides and Video programmes prepared by N.C.E.R.T. and National Institutes for Handicapped were also arranged. Practical demonstration was also given to prepare low-cost teaching aids for the handicapped. The details of the programme have been published in the Times of India dated Feb. 16, 1992.

I very much appreciate the role of Dr.S.K.Goel in conducting this programme successfully. I hope the report of this programme in the present form will be found useful by all the teachers and other professionals who are engaged in the field of handicapped welfare. I am grateful to Extension Department for rendering all possible assistance.

March 16, 1992  
Regional College of Edn.,  
Bhubaneswar.

Sd/-  
Prof.K.C.Panda  
Principal



BRIEF REPORT ON THE "ORIENTATION PROGRAMME OF IED  
TEACHERS FOR THE STATE OF BIHAR"

(February 10 - 14, 1992)

The programme commenced on 10.2.92 at Patna Collegiate School, Daryapurgola, Patna. The Programme Director, after giving the Welcome Address, highlighted the following objectives of this Orientation Programme.

- To acquaint the teachers with different areas of disability, their causes and classifications.
- To enable the teachers in acquiring skills in diagnostic prescriptive teaching techniques.
- To orient the teachers about the various ways of integration of different categories of exceptional children.
- To enable the teachers develop their resource rooms with necessary aids and equipments.
- To help the teachers acquire their competencies in developing IEP.
- To orient the teachers about the psycho-educational characteristics for curriculum planning and implementation.
- To orient the teachers about the creative art activities for the disabled.
- To enable the teachers understand about the steps in educational programming for handicapped.

Mr.K.M.Chaudhury, Principal of Patna Collegiate School delivered the inaugural address and explained the importance of Integrated Education of Disabled. He has been very kind enough to provide all necessary facilities for conducting the programme effectively

in his institution. He spent lot of time with the participants and resource persons inspite of his busy schedule and his interaction was a great source of inspiration for the participants. The programme continued for five days and all the five disability areas, Viz, Mental Retardation, Visual Handicap, Hearing Disorders, Learning Disabilities, & Orthopaedic Disabilities were covered. The salient features of some of the important issues like concept of Special Education, Psychological effects of disabilities, Resource Programmes, Role of Professional Organizations/ Family/Community, Educational Programming, Service Delivery Options, LRE, Task Analysis, etc. were also discussed. In all 20 lectures were delivered during the programme by internal and external resource persons on all the disability areas. Some demonstration classes with handicapped children were also arranged with a view to emphasize speech reading, total communication approach, comprehension, information processing techniques, finger spelling, sign language approach, etc. During these five days, two sessions were devoted to "Group Discussion -cum- Assignment Completion Work". Exercises from all the five disability areas were given to all the participants and the average response to these exercises was 80%. Practical demonstration was given to prepare low-cost teaching aids for the handicapped. The following four Video films prepared by NIMH and AYJNIHH were shown to the participants.

- Sahanubhuti Nahi Sahyog
- Step by step We Learn
- Give them a Chance
- Suniye

Presentation of 160 slides on "Creative Art Activities for the children with Special Needs" prepared by Deptt. of Teacher Education, Special Education & Extension Services (Special Education Unit), NCERT, New Delhi was also arranged. The learning materials prepared in English language were distributed and some materials in Hindi language were also prepared for the benefit of participants. Practical demonstration of Braille Reading and Writing with the help of Braille Slate/ Stylus and Brailier, arithmetic calculations with the help of abacus, etc. was also arranged.

On the last day, the Programme Director presented the brief report of the achievements of this 5-day Orientation Programme in the Valedictory function. Mr. B.L. Baisantry, Director, SCERT, Bihar gave the valedictory address and expressed deep satisfaction with the successful conduct of the programme. He has been very kind enough to visit the venue earlier also with his staff members and interacted with the participants with a view to know the problems in their respective institutions and assured them to provide necessary aids and equipments at the earliest. The certificates were distributed by Director, SCERT. Mrs. Zeenat Ara, Co-ordinator (IED Cell), SCERT, Patna provided whole-hearted support and cooperation at every stage with unfailing cheerfulness. I express my sincere and heartfelt gratitude to Prof.K.C.Panda, Principal, RCE,Bhubaneswar; Prof.S.T.V.G.Acharyulu, Dean & H.O.D.(Education); Mr.B.L.Baisantry,Director, SCERT, Patna; Mr. K.M. Chaudhry, Principal,Patna Collegiate School; Mrs. Zeenat Ara, Co-ordinator(IED Cell),SCERT, Patna; Staff Members of SCERT and Patna Collegiate school;

External and Internal Resource Persons (List attached) Mr. B.B.Singh, APC and his staff (Extension Department) for extending their help in organizing this programme successfully. In the valedictory function, the participants expressed the usefulness of this programme and desired to have more programmes of this kind of longer duration. It was a great pleasure to see the enthusiasm and active participation of all the participants in all the lectures and group discussions. The disabled brothers and sisters in the State of Bihar will certainly be benefitted in the near future and the organization of such Orientation programmes from time to time will bear fruits under the dynamic leadership of Director, SCERT.

It was not possible to include all the lecture notes in this report but, however, an attempt has been made to present the salient features through some of the papers, basic concepts, assignments, etc. included in this document. It is a pleasure to include papers of Prof.K.C.Panda, Principal, R.C.E.,Bhubaneswar and Dr.Jayanthi Narayan, Asst.Professor, NIMH for the benefit of participants. It is hoped that this small document will prove useful to the participants.

( DR. S.K. GOEL )  
PROGRAMME DIRECTOR

PATNA COLLEGE SCHOOL, PATNA

Programme :- Orientation Programme of IED Teachers  
for the state of  
Bihar.

LIST OF RESOURCE PERSONS ( 10.2.92 to 14.2.92 )

EXTERNAL

1. Mr. C.D. Tamboli,  
Reader in Special Education,  
N.C.E.R.T., New Delhi-110016
2. Mr. A. Basu,  
Deputy Director,  
Dte of Technical Training,  
( Blind and Handicapped ),  
Secretariat Bldg. Govt. of West Bengal,  
Calcutta.
3. Mr. Zafar Zaidi,  
Superintendent,  
Vocational Rehabilitation Centre for  
Handicapped, Ministry of Labour(DGET),  
A/84 Gandhi Vihar(Police Colony)  
Anisabad, Patna-800002
4. Mrs. Zeenat Ara,  
Co-ordinator, (I.E.D Cell)  
S.C.E.R.T., Bihar, Patna-800006

Internal

5. Dr. S.K. Goel,  
Reader in Spl. Edu. R.C.E. BBSR.
6. Mr. P. Sahu,  
Lecturer in Spl. Edu. RCE, BBSR.

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" Orientation Programme of IED Teachers for the State of Bihar." scheduled to be held in this School from 10.2.92 to 14.2.1992.

Date	Time	Topic
10.2.92	10AM to 11 AM	Registration
	11AM to 12 PM	Inauguration
	12.00 to 12.15 PM	Tea
	12.15PM to 1.15PM	Concept of Special Education and IED Scheme.
	1.15PM to 2.15PM	LUNCH
	2.15PM to 3.15PM	Concept of Mental Retardation
	3.15PM to 5.00PM	TEA
	3.30PM to 5.00PM	Education and Training and of Mental Retardates.
11.2.92	10AM to 11 AM	Concept of speech and Hearing Impaired
	11AM to 11.15 AM	TEA
	11.15AM to 12.15PM	Definitions and Identification of Hearing Impaired.
	12.15PM to 1.15PM	Aids and Appliances for Hearing Handicapped
	1.15PM to 2.15PM	LUNCH
	2.15PM to 3.15PM	Concept of VIC
	3.15PM to 3.30PM	TEA
	3.30PM to 5.00PM	Diagnosis and Assessment of VIC.
12.2.92	10.00 to 11.00 AM	Aids and Appliances for VIC
	11.00AM to 11.15AM	TEA
	11.15 AM to 12.15 PM	Educational Programmes for VIC
	12.15 PM to 1.15 PM	Plus curriculum
	1.15PM to 2.15PM	LUNCH

	2.15 PM to 3.15PM	Concept of Orthopedic Impairment.
	3.15PM to 3.30PM	TEA
	3.30PM to 5.00PM	Preparation of Teaching Aids.
13.2.1992	10.00 AM to 11.00AM	Assistive & Adaptive Equipment.
	11.00AM to 11.15AM	TEA
	11.15AM to 12.15PM	Demonstration Class with Deaf children.
	12.15 PM to 1.15PM	Special Techniques for Teaching Hearing Impaired.
	1.15PM to 2.15 PM	LUNCH
	2.15PM to 4.30 PM	Slide Presentation and Video films on special Edu.
	4.30PM to 5.30PM	Curriculum Adjustment for VIC.
14.2.1992	9.00AM to 10.00AM	ASSIGNMENTS
	10.00AM to 11.00AM	Concept of learning disability.
	11.00AM to 11.15 AM	TEA
	11.15 to 12.15PM	Identification of LD
	12.15 PM to 1.15PM	Educational Intervention strategies for LD
	1.15PM to 2.15PM	LUNCH
	2.15PM to 2.45 PM	Assignments & group discussion.
	3.15 PM to 3.30PM	TEA
	3.30PM to 5.30 PM	Valedictory/ TA & DA Disbursement/ Distribution of Certificates

दिनांक 10.2.1992 से दिनांक 14.2.1992 तक आयोजित  
प्रशिक्षण चर्चा में प्रतिभागियों की सूची।

क्रमांक	नाम	विद्यालय का नाम
1.	श्री अरुण कुमार	पटना कालेजिस्ट स्कूल, दरियापुरगोला, पटना-800004
2.	डा० मो० कमाल	" " " "
3.	मो० समशूल हक	" " " "
4.	श्री देव नारायण भाट्टाचार्य	" " " "
5.	श्री सुखादेव मंडल	राजकीय कन्या मध्य विद्यालय, लालब हादुर- शास्त्री नगर, पटना-800023
6.	श्रीमती इन्दू ठाकुर	गौतम बुद्ध मध्य विद्यालय, महेन्द्र, पटना- 800006
7.	सुश्री लीली छाप्पा	मैकैजी मध्य विद्यालय, गुलजारबाग, पटना 800007
8.	सुश्री करबी छाप्पा	श्रीचन्द्र मध्य विद्यालय, कुर्मी, पटना- 800010
9.	श्रीमती रेखा सिन्हा	राजकीय बालक मध्य विद्यालय, अमलाटोला, गर्दनीबाग, पटना-800002
10.	मो० साजिद आलम	" " " " "
11.	श्री शिव प्रसाद सिंह	जिला स्कूल राँची, राँची ।
12.	श्री उदित नारायण कंठ	राजकीय, इंसिजन आवासीय उच्च विद्यालय, राजगीर, नालंदा
13.	श्री परशुराम प्रसाद	राजकीय आदिवासी आवासीय उच्च विद्यालय, बनमनछाँ, पूर्णियाँ ।
14.	श्री रामकेश्वर प्रसाद सिन्हा	राजकीय मध्य विद्यालय, पहाड़ी, पटना- 800007
15.	श्रीमती अनूपरानी सिन्हा	" " " " "
16.	श्री राम सुमरणा शर्मा	" " " " "
17.	श्री मुन्नी लाल प्रसाद	मध्य विद्यालय, कुम्हार, पटना-800007
18.	श्री रामानुज सिंह	राजकीय मध्य विद्यालय, वाणी मंदिर, राजवंशी नगर, पटना-800023
19.	श्री बैजनाथ सिंह	श्रीचन्द्र मध्य विद्यालय, कुर्मी, पटना-800010
20.	श्रीमती जगत नन्दिनी सिन्हा	राजकीय कन्या मध्य विद्यालय, गर्दनीबाग, पटना-800002
21.	दीपिका राय	राजकीय कन्या मध्य विद्यालय, गर्दनीबाग, पटना-800002

क्रमांक	नाम	विद्यालय का नाम
22.	श्री रमेश रणक	राजकीय कन्या मध्य विद्यालय, गर्दनीबाग, पटना-800002
23.	श्री विनोद कुमार मिश्रा	जिला स्कूल मुजफ्फरपुर, मुजफ्फरपुर ।
24.	श्री धीरेन्द्र भानु	" " "
25.	श्रीमती ललिता कुमारी	राजकीय मध्य विद्यालय, राजापुर, मैनपुरा, पटना-800001
26.	श्री सुरेश प्रसाद	" " " "
27.	श्री राजेन्द्र प्रसाद	मध्य विद्यालय, कुम्हार, पटना-800007
28.	श्री मदन शर्मा	राजकीय हरिजन आवासीय उच्च विद्यालय, बरसैत, हजारीबाग ।
29.	श्री गोपालजी सिन्हा	राजकीय उच्च विद्यालय, छपरा १ सारण १
30.	श्रीमती ऐश्वर्या सिन्हा	राजकीय बालिका उच्च विद्यालय, राँचीपुर गोलघर, पटना-800004
31.	श्रीमती इन्दु सिन्हा	राजकीय बालिका उच्च विद्यालय, बरियातू, राँची-8
32.	श्री विजय कुमार पोद्दार	राजकीय आदिवासी आवासीय उच्च विद्यालय, महुआटाइ, पलामू ।
33.	श्री उदयप्रकाश	पटना हाई स्कूल, पटना-1
34.	श्रीमती सुधा श्रीवास्तव	रा० बा० उ० वि०, भागलपुर ।
35.	श्री विजय कापरी	जिला स्कूल भागलपुर ।
36.	श्री समर कुमार मल्लिक	रा० आदि० आव० उ० वि०, महुआटाइ, पलामू
37.	श्रीमती मलया चटर्जी	रा० बा० उ० वि०, बरियातू, राँची
38.	श्री शक्तिपाल	रा० पुनियादी विद्यालय, गम्हरिया, सिंहभूम
39.	श्रीमती शिवानी सिन्हा	रा० बा० उ० वि०, गर्दनीबाग, पटना
40.	श्री बैदनाथ मिश्रा	राजकीय हरिजन आ० उ० वि०, बरसैत, ह जारीबाग ।
41.	श्री नन्दलाल सिंह	जिला स्कूल राँची ।
42.	श्री विश्व मोहन प्रसाद	पटना हाई स्कूल, पटना-2

## BASIC CONCEPTS

Dr.S.K.Goel,  
Reader in Spl.Edn.,  
R.C.E.,Bhubaneswar.

### 1. CONCEPT OF SPECIAL EDUCATION

- Special Education is individually planned instruction designed to the unique characteristics of children who have needs that cannot be met by the standard school curriculum.
- The term most often associated with special education is "exceptional children". Exceptional children are those children who have physical, mental, behavioural, or sensory characteristics that differ from the majority of children such that they require special education and related services to develop to their maximum capacity. The category includes children with communication disorders, hearing disorders, visual impairments, physical disabilities, mental retardation, learning disabilities, behaviour disorders, multiple handicaps, high intelligence and unique talents.
- Although the use of varying terminology is quite common in special education, there are technical differences in meaning among a number of terms. Impairment refers to diseased or defective tissue. For example, lack of Oxygen at birth may cause brain damage or neurological impairment that will result in cerebral palsy.

Disability refers to the reduction of function, or the absence, of a particular body part or organ. A person who has an arm or leg missing has a physical disability. Similarly, someone who cannot control the muscles required for speech has a disability in communication. The terms "disorder" and "dysfunction" are frequently used as synonyms for disability.

Handicap refers to the problems that impaired or disabled people have when interacting with their environment. A person who is confined to a wheelchair put it this way: "Sure, I have a disability but I am not handicapped - until I try to get into a building that has a flight of steps and revolving door as its only entrance". A person may be handicapped in one situation and not in another.

- In the past the handicapped have sometimes been cared for and sometimes abused and persecuted.
- Litigation has resulted in court determinations that affirm the right of all handicapped children to a publicly supported education.
- Section 504 of the Rehabilitation Act of 1973 prohibits discrimination against the handicapped in employment, accessibility to facilities, education, and other social services. It is essentially civil rights legislation for the handicapped.
- PL 94-142 guarantees a free and appropriate public education to all handicapped children.
- The National Policy on Education, 1986 (Govt. of India, MHRD) lays special emphasis on the removal of disparities and to equalise educational opportunity by attending to the specific needs of those who have been denied equality so far. The objective should be to integrate the physically and mentally handicapped with the general community as equal partners, to prepare them for normal growth and to enable them to face life with courage and confidence. The Programme

- of Action for the implementation of NPE has stressed the need to strengthen the scheme of Integrated Education for Disabled Children (IEDC) to realize the goal of Universalisation of Primary Education (UPE) for this group of children.
- No child is ineducable. Every child has a fundamental right to educate oneself, the right to an occupation or profession, the right to maintain health and physical well-being, the right to independent living, and the right to love.
- The major issues in special education are Labelling, Normalization, Assessment, Individualized Instruction, Cultural Diversity, child Abuse and Neglect, and Access to the community.
- The assignment of labels to exceptional children can lead to improper practices and should be avoided whenever possible.
- Normalization can be defined as the philosophy that all handicapped people should have the opportunity to obtain an existence as close to the normal as possible; making available to them patterns and conditions of everyday life which are as close as possible to the norms and patterns of the mainstream of society (Nirje, 1969).
- Normalization has helped in greater integration of handicapped with non-handicapped and also in promotion of two practices, deinstitutionalization and mainstreaming.
- Deinstitutionalization refers to the movement to eliminate large institutions, particularly those for the retarded, Wolfenberger (1972)

proposed that long-term, total life care institutions be replaced by small, community-based group homes. These group homes are being encouraged by many parents and special education professionals.

- The second aspect of normalization that related to special education is a reflection of a provision of PL 94-142. The provision stipulates that handicapped children be educated in "the least restrictive environment". This means that handicapped children are to be educated with nonhandicapped children wherever possible, in as nearly normal an environment as possible. This process is known as mainstreaming. .
- Assessment of most exceptional children requires the use of formal and informal techniques, standardized and teacher-made tests, norms- and criterion-referenced tests. Exceptional children are assessed to identify those who need special education programmes and to determine where instruction should be begun. Assessment is a difficult process that often yields imprecise results.
- Exceptional children are educated in a variety of environments, including regular classrooms, resource rooms, special schools, residential facilities, homes and hospitals. It is best to place the child in the least restrictive educational environment that meets the child's needs.
- An individualized educational programme (IEP) must be developed for every exceptional child receiving special education services. It is the foundation on which the child's education is built.



- Special educators should be particularly sensitive to the unique characteristics and needs of exceptional children from minority cultures. They should be certain that the assessment is not biased by conflicts between the criterion they establish and the culture of the child being tested.
- There are many abused and neglected children in special education programmes. Teachers need to be particularly alert for signs of child abuse and neglect: the physical or mental injury, sexual abuse, negligent treatment or maltreatment of a child under the age of 18.
- Efforts are being intensified to remove architectural barriers that prevent people with physical disabilities from gaining access to community facilities.

## 2. CONCEPT OF MENTAL RETARDATION

- Mental retardation is impaired mental ability. A retarded child learns more slowly; at maturity his capacity to understand will be less than normal. He finds difficulty in learning, social adjustment and economic productivity.
- Mental retardation respects neither class nor race. It occurs in families rich and poor, learned and uneducated. No family is immune. Children from deprived backgrounds can become retarded because of lack of early opportunity for intellectual growth. The brutalities of a

life of extreme poverty may affect the child's mental growth.

- Mental retardation is not primarily a medical problem. It is an educational, psychological and social problem. The treatment for the mentally retarded is stimulation and education from the earliest possible moment to develop their limited potential to the utmost. Mental ability grows when nourished by love and care. Minds can also deteriorate from neglect.
- Mental retardation should not be confused with mental illness. As it is not an illness, the question of cure does not arise. It is a life-long condition. However, there are conditions sometimes related to mental retardation which can be improved or cured. For example, deafness, poor vision, emotional disturbance or poor living conditions may sometimes make a child appear retarded. Early detection can help to lessen the degree of handicap.
- Sometimes mental and physical handicap may go together but certainly not always. There are cases of multiple disability when a child suffers from spasticity, or deafness or impaired sight and seizures as well as being retarded.
- Careful diagnosis is essential to ascertain that the child is not suffering from other handicaps which mask normal intellectual potential. This can sometimes be incorrectly diagnosed as mental retardation. Early and careful identification of the truly retarded can often minimise the child's disabilities and improve his functional capacity.

- To be diagnosed as mentally retarded, a person must be significantly subaverage in both intelligence and adaptive behaviour.
- IQ scores should be considered in diagnosing mental retardation, but they are of little use in teaching a retarded child.
- A child's level of adaptive behaviour is determined by comparing his performance to the standards of independence and social responsibility that are expected for his age level and cultural group. Adaptive behaviour is very difficult to measure.
- Mental retardation is defined as significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behaviour and manifested during the developmental period (Grossman, 1977, p 5).
- Classification system related to etiology and clinical type are of little use in education. Genetic irregularities, problems during pregnancy, problems at birth, problems after birth, and psychosocial factors can cause mental retardation, but the causes of most cases are unknown. The type of environment a child has during the first five years of life, the formative years, can make a considerable difference in its intelligence. There are, therefore, a great many causes. Even when we say how mental retardation is caused, it is rarely possible to determine why.

- The classification system based on severity of systems, which identifies children as mildly retarded (Educable Mentally Retarded), moderately retarded (Trainable Mentally Retarded), and Severely/Profoundly retarded, is the system of greatest utility. Of the retarded only 5 percent have severe/profound degree of retardation. They are incapable of guarding themselves against common physical dangers and need life-long nursing care. About 20 percent are moderately retarded and can be taught to care for themselves and do simple routine tasks under supervision. With early and proper teaching, with suitable Schools and vocational training, the mildly retarded, who constitute 75 percent of the retarded population, can learn to be fairly self-supporting adults. These EMR children with good adaptive behaviour skills can often be successfully integrated into regular classes. It must be stressed that rigid classifications cannot be made. Children should be classified into diagnostic categories only when classification will lead to the development of an educational programme that will meet their needs.
  
- The retarded benefit from all types of attention and training. Even the more severely retarded can improve. Among the mildly retarded, the majority can learn to read and write, hold jobs and lead useful lives. Physical activity satisfies many of their needs. Physical fitness increases the child's ability to learn. Children can be taught to take part in sports, play musical instruments, draw, paint, sculpt and dance. Some become competent athletes. With vocational training and rehabilitation, adult retarded can work competently in sheltered

workshops or in open employment. Many learn to handle money, use public transport and achieve a fair degree of independence.

- TMR children are usually educated in special classes. Research into growth and development and into learning processes also greatly assist those working with the moderately retarded to help them develop as fully as possible.
- It is best to regard retarded people as "developing individuals" who are capable of growth and development that can lead to favourable changes in their behaviour. Living arrangements such as group homes and alternative living units located in the local community are preferable to large residential institutions. Parents of the mentally handicapped persons should be guided in forming self-help groups. Professionals should work closely with the families of the mentally handicapped persons. Whenever needed they visit homes, schools and work places to offer help.
- The mentally retarded have many things in common with the normal people. But there are also characteristics which are different. Some of the salient features of mental retardation are  
(i) Slow reaction, (ii) Absence of clarity,  
(iii) Inability to learn fast, (iv) Inability to understand quickly, (v) Inability to decide  
(vi) Inability to remember (vii) Short temper,  
(viii) Lack of coordination (ix) Lack of concentration  
(x) Delay in development.
- In many cases, mental retardation can be prevented with proper care. Research into causes may lead to

prevention. This is the hope for the future.  
In order to prevent mental retardation, here are some precautions to be taken during pregnancy, during delivery and after the birth of the child.

- a) The pregnant woman must have a regular health check up by a qualified doctor.
- b) The pregnant woman must eat a balanced diet including milk, cereals, rice, wheat, green and leafy vegetables, peas, beans, etc. The non-vegetarian food like fish, meat, chicken, eggs, etc. may be eaten if she likes.
- c) If the pregnancy is not wanted and an abortion is planned, it should be done only in a hospital by a qualified doctor.
- d) The pregnant woman must take vaccination against tetanus.
- e) Carrying heavy loads, climbing trees/narrow stools/ladders, walking on slippery ground, etc. during pregnancy should be avoided to prevent accidents.
- f) Medicines should be taken by the pregnant woman only if prescribed by a qualified doctor.
- g) Delivery must be conducted by a trained person in the hospital.
- h) If the baby does not cry immediately after birth or turns blue, proper breathing must be ensured and Oxygen given immediately.

- i) If abnormalities such as big head or the baby looking yellow are noticed, a doctor must be consulted immediately.
- j) During the first year the child should be immunized against diphtheria, whooping cough, polio, tetanus and tuberculosis.
- k) A doctor must be consulted immediately if the child develops fits because uncontrolled fits may lead to mental retardation. Drugs prescribed by the doctor must be given regularly in order to bring fits under control.
- l) High fever of  $104^{\circ}\text{F}$  or above in a child can cause brain damage. Efforts must be made to bring down high fever immediately. After uncovering the body of the child, wet pieces of cloth must be placed on the forehead, body, arms and legs, Change the wet pieces of cloth a number of times. Open all the windows and doors. Use fan also in the room where the child is lying. The child should be given plenty of water with sugar or jaggery to drink. The medicines prescribed by doctor may be given. Do not wrap the child in warm clothing or blanket.
- m) Contaminated food should be avoided during epidemics like brain fever and cholera. Children should not be allowed to eat on the roadside. They should be given fresh food and boiled water.
- n) Head injury due to accidents can cause brain damage. Accidents must be avoided.
- o) Child bearing by a woman under 18 years and over 35 years of age should be avoided.

- p) Some defects can be transmitted from one generation to another. Marriages among blood relatives should be avoided, especially if there is a history of mental retardation in the family.

#### CONCEPT OF VISUAL IMPAIRMENT

- Normal or unimpaired vision has four basic components; (a) the object to be viewed, (b) light that reflects from the object, (c) an intact visual organ ( the eye), and (d) the occipital lobes of the brain, where visual stimuli are interpreted and "Seeing" takes place. The basic function of eye is to collect visual information from the environment and transmit it to the brain.
- The leading causes of visual impairment are cataracts, refractive problems, glaucoma, retinal disorders, retrolental fibroplasia, maternal rubella, retinal and optic nerve disorders, etc.
- Visually impaired children are classified as either blind or partially seeing.
- Definitions of Visual impairment based on visual acuity are used primarily for legal and economic purposes, and for the allocation of funds/facilities/ concessions from the Government for the purchase of educational materials, etc.
- Visual acuity is the ability to clearly distinguish forms or discriminate details at a specified distance. Visual acuity is measured



by having children read letters, numbers or other symbols from a snellen chart 20 feet away. Snellen chart is the most common instrument for screening visual impairments in children. Field of vision is measured in terms of visual arc:

- A person with normal eye sight is said to have 20/20 vision. With correction, a legally blind child has visual acuity of 20/200. A person who has received the best optical correction and can see at 20 feet in the best eye what a person with normal vision can see at 200 feet is considered legally blind. If a person's field of vision is 20 degrees or less, then he/she is considered legally blind. A partially seeing child has visual acuity between 20/200 and 20/70.
- Educational definitions of visual impairment are based on the media through which the child learns rather than on visual acuity.
- Most visually impaired children are not totally blind. Approximately two-thirds of all visually impaired children have some remaining vision. There are about 9 million blind and 45 million visually impaired in India. Besides, about one million cases are added every year. A majority of cases of blindness are either preventable or curable.
- The physical characteristics of visually impaired children other than vision are the same as those of children who are not visually impaired.
- The intellectual development of children is not directly affected by visual impairment or blindness.

However, IQs alone are an inadequate measure of a child's ability to learn. Most experts acknowledge that a child's ability to learn is significantly affected by two factors: intelligence and concept development.

- Visually impaired children tend to lag behind their seeing peers in School achievement.
- The most widely accepted view is that the social and emotional problems of VIC are the result of the attitudes and reactions of persons with normal vision, and not the result of the loss of vision itself.
- Once a child has been placed in the most suitable educational environment, the educator must consider the curriculum that will best meet her needs.
- Children with visual problems are usually taught the same sequence of subjects as children with normal vision, because they need to master the same basic skills. However, unlike sighted children they will need to be taught special skills in addition, such as Orientation and Mobility, Daily Living Skills, Braille Reading and Writing, etc. Although the responsibility for implementing the total curriculum plan lies with the regular teacher, the assistance of a specially trained teacher will be necessary to teach these special skills to VIC.
- The media through which VIC obtain information are tactile,, visual, and auditory.

- Those involved in educational planning should remain flexible in their approach to placement. It is important to remember that the most appropriate, least restrictive environment for VIC is the one in which they would normally be enrolled if they were not visually impaired. They should be educated to the greatest extent possible with sighted children.

#### 4. CONCEPT OF SPEECH AND HEARING HANDICAP

- Communication is disordered when it deviates from accepted norms such that it calls attention to itself, interferes with the message, or distress the speaker or listener.
- Speech results from many organs of the body working cooperatively to produce sound.
- The three major types of sounds in our language are vowels, diphthongs, and consonants.
- Speech and language are developmental processes acquired over time.
- Language disorders are the most complex and most serious of all communication problems.
- Most speech disorders involve problems with articulation, voice, or fluency.
- Speech language pathologists are the professionals to deal with communication disorders.

- The classroom teacher has an important role in the early identification of communication disorders. The following checklist summarizes behaviours and characteristics of children with speech disorders.
  - a) Does the child have any observable deformity of the speech organs ?
  - b) Does the child make frequent natural breaks while speaking words and phrases ?
  - c) Does the child frequently mispronounce despite corrective efforts made by the teacher ?
  - d) Does the child hesitate in participating in oral group activities ?
- Gains made in therapy sessions must be reinforced in the home and classroom for speech therapy to be effective.
- A child listens a lot before he can speak well. Our ears are the doorways to the world of communication. It is the listening child which learns to say his first words by the age of 12 months.
- Our ear is a delicate organ. A damage or injury to any part of the ear may lead to "deafness". One of the common causes of deafness is persistent ear infection and ear discharge. If neglected, it may lead to permanent deafness. It is therefore essential that we pay special attention to our

ear and its hygiene. Prevention is better than cure. Proper hygiene and care of the ears at the right time will help in preventing deafness.

- One of the most serious consequences of hearing loss is that it can hamper the development of speech and language in young children.
- Hearing losses are due to conductive, sensori-neural, mixed, functional and central auditory problems. The conductive loss, which is usually caused by middle ear infections, is the easiest to correct.
- The professionals who evaluate hearing by means of audiometric testing are called audiologists.
- A hearing loss of between 20 and 40 decibels is considered mild. A loss of between 40 and 60 decibels is considered moderate. A 60 to 80 decibel loss is considered severe and losses of more than 80 decibels are considered profound.
- Hearing loss can affect speech and language development, and educational, vocational, social, and emotional adjustment.
- Depending upon whether hearing loss is mild, moderate, severe or profound, the hearing aid is to be fitted. Hearing aids make sound louder but do not make sounds clearer. Auditory training is important for listening.

- For educational purposes, children with hearing disorders are classified as either hard of hearing or deaf.
- The philosophy of total communication makes use of both oral and manual procedures to teach deaf children.
- Children with severe hearing impairment are best educated in a variety of settings, depending on the severity of their problem. These settings include the residential school, day school, special class, and resource room.
- Regular class teachers should be able to recognize signs that may indicate hearing disorders so that they can refer children for hearing evaluations. Teachers can help keep children with hearing disorders in the regular classroom in many ways. A classroom teacher should watch for the following signs of possible hearing loss.
  - i) Does your child have problems paying attention in school ?
  - ii) Does your child favour one ear for listening purposes ?
  - iii) Does he have problems to hear when you speak to him from behind ?
  - iv) Do you think your child can hear, but only when he wants to hear ?

- v) Do you think your child speaks too loudly or too softly ?
- vi) Does he exhibit voice problem and mispronunciation ?
- vii) Does your child tune the Radio/T.V. too loud ?
- viii) Does your child answer questions irrelevantly ?
- ix) Does your child keep away from agemates ?
- x) Is your child unable to respond when you call from the other room ?
- xi) Does your child understand only after few repetitions ?
- xii) Does the child focus on the speaker's face while listening to and understanding speech ?
- xiii) Does the child ask for help from fellow students in taking notes when the teacher gives verbal explanation of the lessons in the classroom ?
- xiv) Does the child complain of frequent earaches or eye discharge ?
- xv) Does the child scratch his ear frequently?
- xvi) Does the child have any observable deformity of the ear ?

- If one or more of these symptoms are present in your child, you need to observe the child and see if the behaviour is consistent in similar situations. If the behaviour is found consistent your child needs professional help from an audiologist.

##### 5. CONCEPT OF LEARNING DISABILITIES

- Learning Disabled (LD) have difficulties in learning to read, write, speak, comprehend even, in the broadest sense, to find places on a map, tell time, or ride a bicycle. It is generally agreed that the LD child does not perform at the level he should be able to.
- The basic problem in learning-disabled children is an incapacity to learn through normal and conventional channels.
- The LD definition adopted by Federal Legislation ( 1977 ) is given as under: "Specific learning disability" means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing or motor handicaps or mental retardation, or of environmental, cultural or economic disadvantage. The above definition generated a lot of controversy.



- National Joint Committee for Learning Disabilities (1981) gave the following definition of LD and there is unanimous agreement on this definition at international level:

" Learning Disabilities" is a generic term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning or mathematical abilities. These disorders are intrinsic to the individual and presumed to be due to central nervous system dysfunction. Even though a learning disability may occur concomitantly with other handicapping conditions ( e.g. sensory impairment, mental retardation, social and emotional disturbance) or environmental influences (e.g. cultural differences, insufficient/ inappropriate instruction, psychogenic factors), it is not the direct result of those conditions or influences.

- From a psychometric standpoint, learning disability can be operationally defined as a significant discrepancy between a child's actual level of achievement and the achievement expected of a child at his/her chronological age.
- Learning disabilities can be identified by intelligence tests, achievement tests and tests of specific learning modalities.

- The decision to diagnose a child as a disabled learner is made by a transdisciplinary team.
- Many children who are diagnosed as having minimal brain dysfunction respond favourably to drug therapy; the continued use of drugs with children, however, may produce long-term side effects and drug therapy is currently a highly controversial issue.
- Our present technology does not enable us to differentiate a child with a learning disability from one whose learning difficulties result from mild mental retardation, emotional disturbance or cultural deprivation. Yet in order to provide these handicapped children with special services they require, we must label them and place them in categorical programmes.
- The causes of learning disabilities are very poorly understood, but they could include such disparate factors as maldevelopment of the brain and poor teaching.
- There are three primary objections to labelling a child as learning disabled:
  - a) Labels do not really define discrete groups of individuals; they do not account for overlap between categories.
  - b) Little evidence exists to support the use of one educational treatment for any particular label.

- c) Biased tests can cause mislabeling.
- The main characteristics of L D children are:
  - a) Attention difficulty
  - b) Perceptual problems
  - c) Memory problems
  - d) Language deficits
  - e) Poor motivation/attitude
  - f) Poor sound/Symbol association
  - g) Transfer difficulties.
- In order to be called a "characteristic2 difficulties that children with learning disabilities have must be
  - a) observed consistently over time
  - b) resistant to simple remedial teaching methods
  - c) accompanied by a significant gap between achievement and ability.
- Perceptual motor disabilities include difficulties with visual perception and/or difficulties in the coordination of visual perception with motor behaviour.
- Psycholinguistic learning disabilities involve difficulties in the area of language and the cognitive processes upon which language is based.
- One of the unfortunate consequences of learning disabilities is the potential for disruption of normal social and emotional development; the term "emotional overlay" is used to describe the adverse emotional and behavioural problems that may develop as a function of a learning disorder.

- Learning disabilities and behaviour disorders may occur in part because our Schools are unable to provide enough high-quality individual instruction.
- The current concept of learning disabilities reflects a long history of different interpretations of how persons learn.
- In contemporary services for the learning disabled, the goal is to provide intense services within the least restrictive environment possible, using a transdisciplinary team approach.
- The regular classroom teacher should become skilled through inservice training in managing learning disabilities within the mainstream of the school.
- A variety of behaviour modification techniques have been shown to be effective in altering behaviours that are incompatible with learning in the classroom.
- Although a consensus regarding the most effective forms of educational intervention is still lacking, individualized instruction with the learning-disabled child frequently produces rapid improvement in areas of academic deficiency.
- In the next few decades there are likely to be major shifts in the conceptualization of learning disabilities. The field is still very young and has not as yet had ample opportunity to examine itself. Education clearly needs a

period of gestation that allows for innovative programming and experimentation with new , procedures.

## 6. CONCEPT OF ORTHOPAEDIC HANDICAP

- Orthopaedically handicapped are those whose physical or health problems result in an impairment of normal interaction with society to the extent that specialized services and programmes are required for them.
- Children with orthopaedic handicaps can be grouped into two types-the mild and severe.
- The orthopaedic impairment can interfere with the normal functioning of the bones, joints, muscles to such an extent that special arrangements are required to accommodate him in regular classes. Some of the orthopaedic impairments are so severe that the children require hospitalization either temporarily or permanently. Children who are temporarily hospitalized can be integrated but those who are permanently hospitalized need hospital bound programmes.
- We will discuss children who are grouped according to their abilities to function in a particular area, and children who are grouped according to medical diagnosis. The functional categories are ambulation, which requires the child's ability to move from place to place, and vitality, which refers to the child's health and ability to sustain life. In the medical category, we will discuss convulsive disorders.

- Areas of the body are frequently designated with **prefixes**, whereas **suffixes** are used to designate conditions of the body. For example, the prefix "hemi" refers to one side of the body, whereas the suffix "plegia" refers to paralysis or the inability to move. Thus, the term "hemiplegia" refers to the paralysis of one side of the body.
- Cerebral palsy ( CP ) is caused by damage to the brain. It is characterized by impaired motor coordination. The other disorders often associated with CP are communication disorders, sensory disorders, convulsive disorders, intellectual deficits, etc., There are several types of cerebral palsy, including spastic, athetoid, ataxia, rigidity, tremor, and mixed.
- The other disorders that affect ambulation are muscular dystrophy, spinal muscular atrophy, poliomyelitis, arthrogryphosis, arthritis, osteogenesis imperfecta, spinal cord injuries and other musculoskeletal disorders. Muscular dystrophy is a progressive weakening and degeneration of the voluntary muscles. Spinal muscular atrophy affects the spinal cord and results in progressive degeneration of the motor nerve cells. Poliomyelitis (infantile paralysis ) is a viral infection that affects or destroys the cells in the spinal cord. When these cells are destroyed, the muscles that they serve eventually die or become paralyzed. The paralysis may affect the entire body or just parts of the body. Many people with polio are bedridden, confined to

wheelchairs, or dependent on braces and crutches for ambulation. Spina bifida is a congenital defect caused by the failure of the bones of the spine to grow together completely. Osteogenesis imperfecta is also known as brittle bone disease. Arthrogryphosis is a congenital disorder characterized by stiff joints and weak muscles. The first signs of the disease Arthritis are general fatigue, stiffness and aching of the joints as they swell and become tender. The five common forms of arthritis are: rheumatoid, osteoarthritis, ankylosing spondylitis, rheumatic fever, and gout.

- A problem in one part of the body frequently causes problems in another part. Children who have spina bifida, muscular disorders, or other disorders frequently have back problems as well. Muscles that pull too hard or that are unequally balanced can cause such disorders as scoliosis, lordosis, and kyphosis. Inadequate muscle tension sometimes results in the complete collapse of the skeletal system.
- A club foot is a disorder that can appear by itself or in conjunction with another problem. Children with this disorder are born with one or both feet turned down and in.
- Amputation is another important disability. It can be partial or complete. Most amputations are necessary because of accidents but some are required by life-threatening physiological disorders and diseases.

- Limbs may also be missing as the result of disruptions in the early fetal development of the limbs. This sometimes occurs randomly but it can also be caused by drugs such as thalidomide if taken by the pregnant woman particularly during the first trimester of pregnancy.
- Some of the disabilities that can affect the vitality of children are congenital heart defects, cystic fibrosis, diabetes, and asthma. All children with these types of disorders will need special assistance from a primary care worker or teacher, and special educational, social and vocational training as well.
- Epilepsy and seizures are categorized under the general heading of convulsive disorders. Epilepsy is caused by uncontrolled electrical discharges in the brain and can usually be controlled with medication. The three primary types of seizures that result from epilepsy are grand mal, petit mal, and psychomotor seizures.
- Many types of assistive and adaptive equipment have been developed to help physically disabled children in their day-to-day existence, travel, adaptive to their environment, and communication. Prosthetic devices such as artificial arms and legs are used to replace missing body parts. Orthotic devices are attachments, such as a leg brace or a splint, that assist a body function.
- Standards have been developed to aid in the elimination of the architectural barriers encountered by the physically disabled.



- The great majority of physically disabled children can be educated in regular classrooms with the use of assistive equipment and special teaching aids. Before recommending the placement of orthopaedically handicapped children in the regular classroom, it is necessary to consider that their medical, travel, transfer and lifting, self-care, and positioning needs can all be appropriately met in the regular classroom.

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## CARE EDUCATION AND MANAGEMENT OF SPECIAL CHILDREN

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### WHO ARE SPECIAL CHILDREN ?

Perhaps there are as many answers to this question as there are special children. In a humanitarian and philosophical sense, all children are special. However, in the present context, we are concerned with special kinds of children who are significantly different from other children in some important dimension of human functioning. These special children are those for whom the presence of a physical, psychological, cognitive, or social factor makes difficult the realization of their needs and full potential. For these children special care and skilled intervention are needed in order to help them reach their potential.

Estimates of the numbers of children who experience various types of special conditions vary widely. Although no single government agency is charged with the responsibility of keeping accurate statistics for all categories of special childhood, it is possible to gain a general estimate of the numbers of children who experience special conditions. Many of the special conditions of childhood are experienced by large numbers of children and require the services of various skilled professionals.

Two major factors distinguish childhood as a unique period in the human life cycle: (a) rapid developmental changes at both the physiological and psychological levels, and (b) dependence upon responsible adult caretakers in order to ensure the integrity of the child's development. The special child has a right to as normal a development as possible and the opportunity to grow to one's fullest human potential. In recent years there have been several attempts to provide sophisticated care to help special children develop to their full potential. Current efforts towards helping the special child have been made possible by two major circumstances: (a) a changing social philosophy that emphasizes the value of the individual and the rights of children and (b) the increasing sophistication of various treatment approaches that has created the hope

that help is always possible. In order to understand the care and management of the special child in contemporary society, it can be safely assumed that special children fared poorly in most previous societies. Genuine care for special children requires a social sensitivity toward them and history bears testimony to the fact that we are slowly acquiring social conscience towards the needs and the rights of the special children. The rights of children in contemporary society have been refined by three major factors: decisions of the courts, enactment of social legislation by Congress, and policy statements by powerful national and international organizations. The special children typically require the help of a team of professionals, each having a unique expertise. The various professional services are required in terms of five major areas associated with special children: (a) medical/paramedical, (b) social / legal, (c) educational, (d) psychological, and (e) special modalities.

#### HOW TO HELP SPECIAL CHILDREN ?

The helping process is described in terms of intervention therapy, management and care, rehabilitation, remediation, and special education. The major forms of medical intervention are medication and surgical procedures. Psychotherapy is the planned management of an interpersonal process intended to relieve the child's initial distress and to enhance developmental processes. Psychotherapy with children includes individual psychotherapy (both verbal and play therapy), family psychotherapy, and group psychotherapy. Behaviour therapy is the application of scientifically derived principles of experimental and social psychology to the alleviation of human problems. Behaviour therapies make use of a wide variety of reinforcement or conditioning procedures. Special education is designed to provide specific appropriate facilities, specialized methods and materials, and specially trained teachers for children with a wide range of developmental problems. Special education includes both special placement and mainstream education. Those forms of intervention that involve the manipulation of the child's home environment are called social intervention. The concept of the wanted child is a critical aspect in foster placement, whereas milieu therapy is a key factor in residential placement. The major forms of intervention available to the special child include medical intervention, psychotherapy,

behaviour therapy, educational intervention or special education, and social intervention or placement.

Management and care are important forms of helping. These terms typically refer to processes of coordinating and monitoring various aspects of intervention. For example, when a child is said to be under a doctor's care, it means that a physician is coordinating treatment procedures. "Management" is a particularly important concept in residential and hospital settings, where all phases of the environment and the treatment process are closely supervised. In this sense, management includes planning, directing, implementing, coordinating, and evaluating the activities of various helping agents involved with a patient. Recently, parental management of the behaviour of special children is also being recognized as an important part of the helping process. There is now a growing recognition that management procedures implemented by both parents and professionals are key components of the helping process.

#### HOW TO EDUCATE SPECIAL CHILDREN ?

Special education is individually planned instruction designed to respond to the unique characteristics of children who have needs that cannot be met by the standard school curriculum. Special children are assessed to identify those who need special education programmes and to determine where instruction should be begun. Special children are educated in a variety of environments, including regular classrooms, resource rooms, special schools, residential facilities, homes, and hospitals. It is best to place the child in the least restrictive educational environment that meets the child's needs. An individualized educational programme must be developed for every special child who is enrolled in an educational setting. Special educators should be particularly sensitive to the unique characteristics and needs of special children. There are many abused and neglected children in special education programmes. Teachers need to be particularly alert for signs of child abuse and neglect. Efforts need to be intensified to remove architectural barriers that prevent people with physical disabilities from gaining access to community facilities.

Many research studies have demonstrated the importance of providing early education for special children. In fact, those special children who do not receive early education may actually decline in their development. The pre school special child has the same needs, wants, and problems as all other children, but he/she also has additional difficulties to overcome. Intelligence is not fixed but can be modified by environment. Special children go through the same developmental stages as other children. Developmental norms are useful in screening, assessing, and developing curricula for young special children. The areas of development of most importance in young special children are gross motor, fine motor, perception, conceptual, social-emotional, communication, and self-help. State and local officials are involved in casefinding, child find, and early identification projects. The purpose of these projects is to identify young handicapped children who need services. Screening is the testing of a large number of children to identify those who need additional in-depth diagnosis and assessment; these activities can result in the provision of special services. Services are most frequently delivered to young handicapped children in centrally located service-delivery centres, in the children's homes, or in both the centres and the children's homes. There is a trend to develop and offer infant intervention projects for very young children to reduce the effects of disabling conditions on later development. It is utmost essential to include parents in the education programmes for their young handicapped children.

#### HOW TO INVOLVE PARENTS OF SPECIAL CHILDREN ?

Parents and special educators have been working together in the recent years to meet the challenges presented by special children. Parents are becoming increasingly involved in planning and carrying out their children's educational programmes. Although reactions of parents to the birth of a handicapped child vary greatly, they may experience periods of shock, denial, guilt, fear, overprotectiveness, overt rejection, before reaching the stage of acceptance. The attitudes of parents can improve or adversely affect the behaviour of their handicapped children. The siblings of handicapped children largely

adopt the attitudes of their parents towards the handicapped child. The parents of handicapped children need a great deal of information about such subjects as diagnosis, treatment, management, and support services. The relationship between parents and professionals concerned with handicapped children is gradually improving. Successful relationship depends on mutual trust and understanding. Parents can assist in the identification, assessment, and programming of their children and in the implementation and evaluation of their children's programmes. The parents of special children have played an important role in the initiation and development of special education programmes. They have supported every major effort to develop services.

In spite of the many contributions of parents, they have frequently been excluded from many programmes meant for their children. Education has mostly been left to the professionals. Recently, however, parents have begun to assume a broader role in the educational process. Educators have realised that parents must be involved in all the important programmes for effective implementation. Parents have the legal right to be involved in all decisions regarding the education of their handicapped children. They also have the protection of due process if they are dissatisfied with the educational programme that has been provided.

There are several considerations involved in placing children in the regular classroom, special class, hospital setting, institution, or other administrative arrangement. The educator must meet certain legal requirements, develop parent organizations and training programmes, and develop a plan for conducting parent conferences. Parent programmes are generally designed to provide parents with social and emotional support. Parent programmes also provide a forum for the exchange of information. They can involve scheduling guest speakers, maintaining a lending library, or publishing a newsletter. A major goal of all parent programmes should be to improve the interactions between parents and their handicapped child. Professionals should be candid with parents and communicate in a non-authoritarian manner. Parents should be treated with

consideration and sensitivity. Many parents in India also feel like their western counterparts that there should be a protection of due process if they are dissatisfied with diagnostic, educational or any other programme provided for their handicapped children in schools.

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MENTAL RETARDATION: THE PRESENT SCENARIO AND FUTURE  
PLAN PERSPECTIVES

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Mental Retardation includes a range of conditions that are determined by various biological, sociological or social conditions. There are various definitions and classification system of Mental Retardation that have been in the field from time to time through out the World. However, the Mental Retardation is not a defect and it is not a disease, but it is a condition of difference in characteristics keeping in average individual as the norm. The 1973 revision of the American Association of Mental Deficiency has been accepted as the single unambiguous concept of retardation recognised by the W H O experts which reads as "MENTAL RETARDATION REFERENCE TO SPECIALLY SUB-AVERAGE AND GENERALLY INTELLECTUALLY FUNCTIONING EXISTING CONCURRENTS WITH DEFICIENCY IN ADAPTIVE BEHAVIOUR AND MANIFESTING DURING THE DEVELOPMENT PERIOD". In other words, the emphasis currently placed in defining Mental Retardation as (a) an individual will manifest deficiency in both intellectual functioning and adaptive behaviour, and (b) keeping the average as the point of reference, it can be classified as (i) Mild (IQ 52 to 68) indicating slow development of an individual with disability of being educated with training and atleast partially leading an independent economic life. (ii) Moderate (IQ 36 to 51) Individuals in this category are slow in their development but their capacity of learning is too low. They can be trained to some extent for developing work skills in a sheltered workshop and to live in a protected environment. (iii) Severe (IQ 20 to 35) Individuals in this category can manage their own affairs but in most cases their speech, language, and motor activities are adversely affected. (iv) Profound (IQ 19 and below) The degree of deficiency in different characteristics are so low that they are incapable of taking care of themselves and need constant custodial care for survival. The border line intelligent cases i.e., IQ having 69 and above are not included in the category of retardation.

So far as the etiologies are concerned, two major divisions of causes have been identified (a) Causes which are pathological in origin, and (b) Causes which are socio cultural.

The pathological type of Mental Retardation have been conveniently divided into those which are genetically determined and those which are environmentally determined. These two however are not necessarily mutually exclusive. For example: Mental Retardation may be genetic in origin such as PKU, Gallacto semia, Cretinism, Microcephally, Hydrocephally, Down syndrome etc.

Environmental causes leading to pathological types of Mental Retardation may occur before, during, or after birth. These may include congenital syphilis, Rubella, RH incompatibility (pre-natal) and Meningitis, whooping cough, Lead poisoning, Ac-ute dehydration, Encephalopathy (post-natal).

Retardation in intellectual ability may also be due to cultural and familial factors. A child having a retarded parent and a retarded sibling who has been brought up in a low socio-economic home has the pre-disposition to be Mentally Retarded. So far as the Mild retardation is concerned, socio-cultural deprivation seems to be one of the major causes. Especially in Indian context, it includes casteism, prejudice, discrimination, poverty, poor nutrition, inadequate health service, inferior quality of education and unemployment and many such adverse environment influences which cause irreversible effects upon brain growth and behaviour, although a direct causal link is difficult to establish.

There are evidences from cross-cultural research all over the World, that learning is enhanced by stimulation which continues to be rather low or restricted for those who live below the poverty line in India. Hence, deprivation of stimulating environment manifest not only in poor cognitive functioning but lowers the adaptive behaviour.

Two major perspectives for tackling the problem of Mental Retardation are: Prevention and Amelioration. The steps of prevention would imply a deeper understanding of the clinical basis of Mental Retardation and the measures for prevention would also accordingly be of diverse in nature. The steps for Amelioration would include educational and welfare measures which includes rehabilitation on the one hand and intervention on the other.

While these few points would be discussed in a different context, when the social, educational and medical basis are to be analysed for understanding Mental Retardation, it seems desirable to look at a few dimensions of the problem. Those dimensions which would form the basis of the present paper are :

- (a) the present Scenario, which includes
  - (i) Knowledge of the problem of the M.R.
  - (ii) Special facilities and service delivery systems available in the country for the M.R.
- (b) The National Policies on Health, Mental Handicap, and M.E. 1964.
- (c) The Integrated Education system
- (d) The Innovative approaches
  - (i) Identifying - assisting individual with the disability
  - (ii) Community Integration
  - (iii) Employment and people with disability
- (e) The future perspective plan i.e., a Man Power Planning in
  - (i) Education Sector, and
  - (ii) Innovations

#### Present Scenario

**Knowledge of the Problem:** There have been various reports regarding the prevalence of Mental Retardation in our country. The POA reports that nearly 1.7 million children are MR who are within UPE range i.e. (CA 4-15 years) of which approximately 0.50 percent only are in the schools located in the urban/metropolitan areas. Rural areas, where 80 percent of these children live remain largely unserved by educational facilities. Even the coverage under IED scheme is negligibly small.

The NIMH which summarised and abstracted data from different sources has clearly pointed out that, "2 percent of the general population has mental retardation, 3/4 of them have mild mental retardation, while the remaining 1/4th have severe mental retardation with IQ 50 and below. Children with delayed development upto the age of 3 years require the services of early identification, prevention and intervention and these are provided by medical departments as well as in Baby Clinics or child guidance clinics by professionals like Paediatricians, Psychiatrists and clinical Psychologists. Pre-School and special education services are provided by special educators. Children

with mild mental retardation who can benefit from regular education are recommended to attend the regular schools, while children with moderate and severe mental retardation are required to attend special schools". The NIMH has also arrived at projected figures of 40 lakhs of severe mental retardation cases and approximately 120 lakhs of mild mental retardation cases taking the population figure at the end of 7th Plan at 80 crores.

Special institutions for the mentally retarded children were established for the first time in the early 1940's. At present there are a little over 200 institutions with facility for care of about 10,000 individuals. The inadequacy of the services is clear as the current services do not cover even 1% of the mentally handicapped persons. Only a few of these are residential and others provide all day care facilities.

The available facilities in terms of day schools, residential schools, training centres for teachers, National/Regional Institutes in the field of Mental Retardation are given below for looking at the facilities available as against the incidents of retardation.

TABLE-1				
STATES	No. of institutions working in the field of M.R.	No. of residential facilities.	No. of institutions offering training courses	National/Regional Institutions in the field - Capital.
1. Andaman & Nicobar Islands.	1	-	-	-
2. Andhra Pradesh	26	7	1	1
3. Assam	2	1	-	-
4. Bihar	5	-	-	-
5. Chandigarh	3	1	-	-
6. Delhi	19	3	2	1
7. Goa	2	1	-	-
8. Gujarat	27	5	-	-
9. Haryana	1	1	-	-
10. Himachal Pradesh	1	1	-	-
11. Karnataka	61	15	1	-
12. Kerala	60	16	1	-
13. Madhya Pradesh	3	1	-	-
14. Maharashtra	54	7	3	1
15. Manipur	1	1	-	-
16. Orissa	1*	1*	1	1
17. Pondichery	1	1	-	-
18. Punjab	1	-	-	-
19. Rajasthan	6	2	-	-
20. Tamilnadu	40	20	2	-
21. Uttar Pradesh	10	4	-	1
22. West Bengal	18	5	1	1
Total:-	350	93	12	6

\* Intake is 244 in all 90-91

The meagre services currently available are unevenly distributed in the various parts of the country. The majority of the institutions are in big metropolitan cities and some bigger towns. Nearly 60 to 70% of major towns do not have any facilities. Another service lacuna is the lack of facilities for those above the age of 18 years.

The institutions generally provide training in activities of daily life, social adaptation, and academic programmes. Rehabilitation services for the handicapped adults are just beginning to be developed. However, the current facilities focus their work with mild mental handicap and those without any associated physical disabilities. The services for the severely and multiply handicapped persons is almost not available in the country.

Diagnostic and evaluation facilities are available at the level of medical colleges, departments of psychiatry, some of the special schools, child guidance centres and to a limited extent in the private sector. These are far from adequate.

From the observation of the above Table, a quantitative gap in the coverage is most prominent. However, apart from the quantitative gap in educational coverage of the MRs, one needs to pay attention to the qualitative aspects of the education of MRs. "Most of the institutions are run by voluntary organisations. While there are very good institutions, many do not have trained staff, adequate accommodation, and the necessary equipment and material. Some of these institutions are like homes for destitutes rather than educational institutions". POA and Man Power planning is thus necessary for meeting the requirements of MR squarely from the points of view of education training, and care by the year 2000.

(c) National Policies on Health, Education and Mental Handicap

The National Policies reflect the recognition of the problem of mental handicap and approaches to provide service.

The National Health Policy (1982) outlines approaches that have components of comprehensive net work of services; transfer of knowledge, simple skills and technologies to health volunteers; building up of individual self-reliance and effective community participation; provision of services in an integrated manner; organisation of domiciliary

services and active involvement of voluntary agencies. The current health policy attempts a broader coverage of services, as well as the approaches.

The National Policy on Education (1986) gives special emphasis on removal of disparities and to equalise educational opportunities to one and all including women, backward sections of the society, minorities, handicapped and those living in backward areas. In regard to the HANDICAPPED persons, the policy aims to integrate the physically and mentally handicapped individuals with the general community as equal partners. To achieve the above objectives the policy outlines the following measures:

- (i) integrated education of handicapped with other children.
- (ii) special schools with hostels at district headquarter
- (iii) vocational training,
- (iv) reorientation of teacher's training programmes to deal with the handicapped children, and
- (v) encouragement to voluntary efforts.

The new Twenty-point programme (1986) includes the needs of the handicapped citizens as part of the health programme (point 8) as follows: 'Pay special attention to programmes for the rehabilitation of the handicapped'. Thus the government is already committed to provide services for the mentally handicapped individuals.

The National Policy on Mentally Handicapped (1989) has accepted certain strategies for actions which includes prevention, early identification, rehabilitation and several other welfare schemes and benefits. These are re-produced below.

The policy further highlights appropriate assessment, family care, developing a National Trust giving tax benefits, establishment of special schools, introduction of vocational training and rehabilitation, launching pilot programmes involving legislative measures and developing management and research organisations in the field of Mentally Retarded through its National and Regional Institutes.

Strategies for Action (Mentally Handicapped) 1989

The complex needs of the mentally handicapped individuals at different developmental stages require appropriate strategies. The major areas relate to prevention, early identification and stimulation, care including rehabilitation, assessment and certification, social security and education and training.

Recent advances have provided some insights into the causes of mental handicap and many of them are preventable. In India, there is an urgent need to improvise pre-natal, peri-natal and post-natal care, to prevent mental handicap. Specific steps that can be taken are:

- (1) In view of the need to protect the foetus and the new born child and to provide optimum conditions for development, and to avoid the high mortality and morbidity associated with prematurity and low birth weight, high priority should be given to (a) the provision of the adequate food, (b) education about nutrition to all pregnant women in order to prevent cognitive failure in their children, and (c) provide pregnant women with immunization and the schedules for immunization for their infants which they should follow.
- (2) Direct counselling by health workers to pregnant women against smoking and drinking as it can reduce the prevalence of developmental anomalies and low birth weight caused by cigarette smoking and alcohol use in pregnancy.
- (3) To prevent neo-natal tetanus pregnant women should receive tetanus toxoid after the first trimester and birth attendants should be trained in techniques for cutting the umbilical cord.
- (4) In iodine-deficient areas, women of child-bearing age should be given iodized oil injections or iodized salt which can prevent the congenital iodine deficiency syndrome.
- (5) Birth attendants should be trained in recognizing the indications for high risk pregnancies in order to refer complicated deliveries to back up obstetrical facilities since the prevention of obstetrical complications can lead to significant reduction in the number of children with damage to the central nervous system.

- (6) The promotion of breast-feeding should be an integral component of primary health care in view of the physiological and psychological benefit of breast-feeding.
- (7) Programme for child nutrition (including the education of mothers about nutrition) should be a major component of prevention in view of the role malnutrition and inadequate child rearing can play in impairing cognitive and social development.
- (8) Immunization of children against whooping cough, measles, rubella, polio-myelitis, tetanus and diphtheria.
- (9) There is strong evidence that child development is adversely affected when mothers have too many children at too short intervals, and when they are under 15. Education on family planning and access to effective means of contraception should be essential elements of maternal and child care.
- (10) Identifying and treating the cases of epilepsy by involving primary health care personnel.
- (11) Recognition and treatment of sensory and motor handicaps through PHC personnel, staff of school health clinic and trained school teachers.
- (12) Providing early stimulation programme through enriched day-care centres staffed with trained care-takers and involving parents.
- (13) Teaching of parenting skills which includes health care training, balanced diet, helping the mothers with behavioral management, helping her organising her day and home situation to provide more environmental stimulation and encouraging reciprocal language behaviour between parents and children, especially for low income and culturally deprived groups, and families of high risk children.

All these activities can be integrated with health, welfare and education programmes.

#### Early Identification

Mental handicap in India, to a significant extent arise from factors related to parental, natal and early post-natal factors. The damage to the brain and the delayed development is best recognised at the earliest time possible.



There is sufficient experience to show the value of the stimulation programme begun early in life. There is also data from the country to show that mentally handicapped persons each for help at around the age of 6-8 years. It is necessary to initiate activities for early identification and stimulation.

It has been now recognised that the home-care is the most appropriate method of maximising the capacities of the child. In order to achieve this, it is necessary that the help and services are available to the families in an accessible, acceptable and affordable manner. In a country which is predominantly rural and agrarian it becomes essential that all sectors are oriented to provide this service. The family as a unit should be the focus of all interventions as outlined in an earlier section.

It is recognised that the primary care workers in the periphery are already carrying out activities that lead to prevention of mental handicap like immunization, assisted delivery, nutrition education and family planning. In addition they come across mentally handicapped children when parents approach them for other problems like delayed speech, epilepsy, poor growth and inter-current illness. Against this background, it is recognised that the different categories of health personnel like community health volunteers, MPWs, health supervisors, medical officers and pediatricians can be oriented to intensify their efforts towards prevention, early identification and guidance for home-care.

#### Care including Rehabilitation

The care of the handicapped individuals would have a developmental perspective which means services will meet the needs at different stages and ages of development of a mentally handicapped individual. As noted earlier, current services like special schools, residential facilities, home-care programme only fulfil the needs of some stages. The programmes of future should be developed in a coordinated, integrated and comprehensive manner. This would require greater linkages with the different sectors with appropriate referral linkages and mechanisms of interactions.

The approach to provide services to all the mentally handicapped persons would bring for the needs for rehabilitation programmes beyond those provided by home training, special schools and vocational training. Specific efforts are to be made for rehabilitation at the district level, along the lines of DRC with active community participation.

#### The Integrated Education System

The Integrated Education System scheme (IED) now designated as PIED is a centrally sponsored scheme which envisages that mild mentally retarded can be brought to the main stream and accordingly the various States have implemented the scheme which was originally meant for disabilities other than M.R. and it now includes the M.R. children as beneficiaries of the system. The assistance is given as per the scheme by the Central Government.

In our State, the PIED scheme is being operated by the SCERT which monitors the programme academically. At present the scheme is operating in the Baliantha Block and the teachers in phased manner are getting trained through the Multi Category Training of Teachers Course introduced in Regional College of Education, Bhubaneswar, 1989. Massive introduction of the system is necessary in order to meet large clientele in the area of M.R.

#### Innovative Approaches

Among the various approaches that are designed during 1989 and 1990 in these areas in some of the developed countries of the World and which have implications for application in our society would constitute what is called now the Innovative approaches. One such approach is Technology. The Technology is a powerful learning tool for children with spoken and written language deficits, Down syndrome to make significant progress both in spoken and written language learning. They learn the language by looking the speech sound and the text when they hear and see and develop their internal system of meaning. Beginning early in the first year of life, children developed many experience on what they see, hear, smell, feel and thereafter they organise their experience and gradually they developed linkage between meaning, sound and writing. The micro-computers are used

in teaching language using the programmes built-in for age, proper learning of language including the grammatical structures. Even in school, computers have been used for teaching language through drills on the key board. The hard ware and soft ware are available for use by children who are deficient in intellectual abilities.

Community Integration is another innovation for helping the disabled including M.R. This idea of Community Integration of students with the disabilities is a major commitment of any rehabilitative service. This commitment to integrate them in the community is based upon the premise that isolation makes it harder for children with disability to develop appropriate inter-personal skills. The lack of such skills often creates obstacles to proper adjustment. Without the experience of living and work in the community settings, it becomes more difficult for students with disability to succeed in the real world after they leave their school. Therefore, the argument is, if the society is for every body then the school should be for every body. Therefore, the first measure of a school should be the extent to which it can serve all its students. The second proposition is that schools are responsible for preparing students for their lives. They must ensure success after leaving their schools. Therefore the assessment for such involvement is to know what kind of friendship a disabled student has, how many friendship he has, how does he derive a social experience, and the number of times they leave these disabled children in the "Circle of Friends" in the Community and observe them and their adjustment. The same way, the Community should be a Caring Community which would allow the circle of friends to grow. This system has been found very successful in helping Mentally Retarded children having Down syndrome, well integrated in the community by using the McGill Action Planning Systems (MAPS). A similar approach can be also developed in our society which would eliminate the casteism, discrimination, stigma and isolation. Extensive research has shown with non-aversive intervention do indeed extinguish negative behaviour and the resulting improved

behaviour can be maintained and generalised in a variety of community environments. The philosophy behind de-institutionalization movement is based on the premise that children with severe MR and negative behaviour should and can be an integral part of the normal mainstream of social life. These children must therefore should get family support and environmental support of the neighbourhood, in the sense that they are accepted as fullfledged contributors to community life.

The third step refers to employment and Employment which is a challenge for the Nineties. The labour market employing is real discouraging. Not working is perhaps the truest definition of what it means to be disabled. Even in the advanced countries of the World disabilities have contributed disproportionately to the population of work. Therefore, there is a need for employing the disabilities even for that matter MR in ability specific activities developed under a sheltered workshop setting or in a National Rehabilitation centre. Fortunately, however, there is a growing recognition of recruitment of the disabled in the occupational system. Experience suggests that human services can offer excellent alternative to the disabled and they do get through typical job training programmes. In fact, the potentialities can be developed through training and proper supervision. For them the career development resource may be a part of the rehabilitation centres where they get vocational training, job application training and getting employment through interview training. These aspects of training may be incorporated in our existing RTCs in the country. In fact, vocational training and employment is only means of making the Mentally Retarded economically, and socially self dependent, atleast partially. Vocational Schools for Mentally Retarded are not many in India. Many of the retarded do not find suitable jobs even after education and training in special schools. For Mentally Handicapped adults, sheltered workshop, Farms and employment by industries are needed. There is a necessity therefore, for starting sheltered workshop either independently or by attachment to the school system.

### Future Perspective and Man Power Planning in Mental Retardation

Any programme in the service of the retarded called for a coordinated effort by all agencies in an attempt to ameliorate the conditions of the handicapped and to rehabilitate him into the community. This planning is necessary at the level of the Centre and the State, local authorities, voluntary agencies and the public. The very nature of the problem of retardation also involves different professionals with diversified background in training and education. Adequate training and education of all personnel such as teachers, medical practitioners, specialists, psychologists, social workers, technicians and others would be required in order to manage the scheme for preventing, educating and rehabilitating the Mentally Retarded including parent counselling. For these, there are different targets of man power requirements which have been initiated recently in the country.

#### Man Power Requirement :

The reports of a survey (August, 1987) conducted by NIMH indicate that there are nearly 300 institutions enrolling 12,121 MR children. This figure would be more at the moment but not large enough to encompass the group of MR at hand, the decennial growth rate being 300 to 400 percent. The survey revealed that there are 3,122 professionals. These include 960 special educators; and the rest are professionals such as Psychologists, medical personnel, speech therapists, social workers, physio-therapists, and occupational therapists. There were 642 teachers who were not qualified for the job. The average staff strength was approximately 11 and the teacher-pupil ratio was 1:12.6 (with trained staff) and 1:7.5 (with untrained staff were included). It is considered ideal to have a realistic teacher-pupil ratio of 1:10 to meet our emergent requirements.

The POA has suggested that the Man Power requirement should also take into account the identification, diagnosis and assessment of the handicapped for placement in schools. The implication is that MR children will be

prepared for school education under ECE, and pre-school education in the age group of 0-5. Hence there is a need for training paediatricians, psychiatrists, and clinical psychologists. Currently there are no facilities or provisions for such training.

For the higher age group (6-18 years) of MR children educational services either in special schools or in integrated education programme have to be provided. In order to run and activate the programme, there is a need for training special teachers/special educators for special schools and resource teachers for integrated education programmes. Further, in order to implement programme guidelines and targets of UPE, such teaching personnel have to be trained in the area of mentally retarded, through preservice and inservice training programmes and short term courses.

In the same continuum, after the age of schooling, i.e. approximately 18 years, these mentally handicapped persons are given vocational training for economic independence. Sheltered workshops for the severely handicapped and vocational training centres for the mildly mentally handicapped are necessary. At present the country does not have such training centres and facilities to meet the requirements. There is thus a need for training of vocational personnel.

Research and Development constitute another dimension of manpower planning. It has been already stated in FOA that the geospatial distribution of the handicapped and the fluctuations in the incidence of disability make the task of educational planning very complex. The functions expected for these personnel would be in the area of

- a) developing learning material, teacher's handbook and other instructional materials needed for the education and management of MR children.
- b) developing equipment, materials and techniques of teaching suitable to the learning of MR children.
- c) developing audio-visual and/or video materials for supplementing instruction
- d) developing tools for psychological assessment and diagnosis of learning difficulties etc.
- e) documentation and dissemination of innovative and successful practices in the education of MR children.

Research in education of MR in the Indian socio-cultural milieu is to be taken up immediately. Training of Research workers therefore, is a major goal.

Once again there is no man power in this area of speciality excepting the ones located in the National and Regional Institutes of NIMH, NCERT, some University Departments, and NIMHANS. The efforts of these groups need to be strengthened in each State.

Apart from the special organisations catering to special education, the efforts of Organisations, such as SCERTs, DIETs and sub-divisional and block level institutions both public and private have to be strengthened in terms of specially trained education officers and facilities in the area of special education.

Projection of Man Power Requirement in the Eighth Five Year Plan (POA, 1986):

- a) In the eighth five year plan, 5000 special schools at the sub-district level are to be opened and the number of these schools would be expected to be around 10,000 during the Ninth Five Year Plan.
- b) Assuming that each school will need 8 to 10 special teachers about 3500-4000 teachers would be required in the current plan (7th 5 Year Plan).
- c) The requirements of the eighth plan would be over and above this limit and is a simple arithmetic.
- d) Special teachers, resource teachers, psychologists, doctors, physiotherapists, occupational therapists have to be exposed to inservice training of atleast 4 to 6 weeks for Psychologists, 2 weeks for Doctors and 2 weeks for Vocational Teachers.

More specially, the projections indicating the requirement of Special Teachers during Eighth Five Year may be patterned as per the exercise already done by NIMH:

- All persons with severe mental retardation require the services of special school
- There are about 40 lakhs persons with mental retardation of whom 36.4 are children in the age range of 5-19 years, that is the school going age. This will give a figure of 14,56,000.
- The target during the eighth five year plan has been kept as services for 50% of all handicapped children. This will give a figure of 7,28,000.
- Average strength of existing special schools is 40 children which would require to be increased to 50 children per school during the eighth five year plan. Certain special schools which run home based training programmes are able to cater to three times the number of children admitted in the special schools.

It is therefore, proposed that each special school should admit 50 children with severe mental retardation in special schools for centre based training. In addition every special school should provide services of home based training to 150 children with mental retardation. This way each special school would be able to meet the special educational requirements of 200 children.

- Keeping in view the above assumptions, 1,82,000 children with severe mental retardation would require centre based training while 5,46,000 children would require home based training. Total number of special schools required will be 3,640.
- At the end of the Seventh Five Year Plan, it is estimated that there will be 440 special schools, therefore the number of special schools required during the Eighth Five Year Plan will be 3200 which would mean every year 640 special schools would require to be added.
- If we keep the student-teacher ratio at 1:10 the requirement of special teachers during the Eighth Five Year Plan will be 10 special teachers per school which will come to 32,000 special teachers during the Eighth Five Year Plan or 6,400 special teachers per year would require to be trained. 1/4th of all teachers would require to undergo one year training course leading to Diploma in Special Education for mentally retarded persons, that is 1,600 teachers would require to be trained per year. The remaining 1/4th of 6,400 that is 4,800 would require a short-term training programme of 3 months duration.
- Each training centre can train about 50 teachers for one academic year and 50 teachers aids for 3 months short-term course. To sum up nearly 100 teachers can be trained by one training centre. This way 64 training centres are required to generate the manpower of special teachers during the Eighth Five Year Plan.
- The existing strength of 14 training institutions with an output of 200 special teachers is grossly inadequate. The existing capacity per training institution which trains about 15 trainees per year would require to be enhanced to 20 training per year. In addition, each of the existing training institution would have to train in addition to 60 persons per year under short-term training programme.
- The analysis given above shows that 66 new training institutions would be required with an output of 80 teachers per year.

The following category of personnel are necessary for different levels of education:



1. Service Providers:

- |   |   |
|---|---|
| a) Pre-School level early intervention services | - Anganwadi workers, village health guides, village Rehabilitation Workers.<br>- Multi Rehabilitation Assistants, Multipurpose health workers.                |
| b) School level                                 | - Special teachers in special schools, special teachers in regular schools, pre-school Educators.   |
| 2. Master Trainers                              | - Special Teacher Education of Psychologists.   |
| 3. Research and Development                     | - Experts in allied disciplines, Psychology, Education, Sociology, etc. Sciences, Special Education.  |
| 4. Administrators                               | - At various levels in Government and Non-Government sectors.   |
| 5. Associated Professionals                     | - Medical Personnel, Physio-Therapists, Occupational Therapists, Speech Pathologists, Social Workers, Vocational Counsellors, Employment/ Placement Officers. |

The training requirements for generation of the above mentioned man power is as follows:

Service Providers: The training in mental retardation for multi-purpose rehabilitation workers, village health guides and Anganwadi workers for a duration of 4 weeks which would enable them to identify and refer the mentally handicapped persons to appropriate training facilities. These can be offered at District Rehabilitation Centres.

The training of special teachers for special Schools: The special teachers in regular school and pre-school educators should be for a period of one academic year leading to a Diploma in Special Education. The ratio of theory and practical for this course should be 40:60 focussing more on practicals. Such a training organisation should have special educators and Psychology master trainers as core staff members.

Administrative Staff:

Short term courses should be organised for Academic, Administrative staff at various levels.

- a) Special Schools : One week training for refresher course once in 5 years.
- b) Regular Schools : One week orientation course in five years.
- c) Education Officers: (Officers from IED cells, SCERT staff, Directorate of Education and Social Welfare) - Two week course.
- d) Educational Administration: Deputy Directors, District Education Officers, Assistant Directors from Education, Health and Welfare Ministry- Three days orientation course.

#### Associated Professionals:

Short training programmes ranging from 3 days to two weeks for associated professionals working with mentally retarded including social workers, psychologists, OT/PT, Speech Pathologists and Audiologists, Vocational Counsellors, Employment Placement Officers, Psychiatrists and Paediatricians should be organised.

The development of manpower for immediate requirement and for the next 5 to 10 years is recommended as under for MR

	<u>Immediate</u> 1989-90	<u>Long Term</u> 1990-95    1995-2000	
a) No. of special schools to be introduced for MR (50 children in each school and 150 children for home based training with MR)	440	3200	3200
b) No. of teachers per schools @ 10 with T/R ratio 1:10	4400	3200	3200
c) Institutions for training of Special Teachers (50 each)	44	64 @ 640 per Year	64 @ 640 per Year
d) Master teachers (to train special teachers)	200	400	600
e) Teaching and research Institutions are to be established (20%)	10	20	30

f) Inservice programmes will be organised by NIMH, RCE, NCERT, NIMH Regional Centres and University Departments of Special Education for preparation of teachers for the integrated setting.

- g) Inservice programmes of different duration as specified earlier would be undertaken by NIMH, RIMH, NCEM, RCE, University Departments for Psychologists, Doctors, Vocational Teachers, Physio and Occupational Therapists.
- h) Training of Special Teacher Educators/Master Trainers will be undertaken in the National and Regional Centres and University Departments. Training of short term duration for Psychologists, Doctors, Administrators can be undertaken by the Institutes/Centres by the help of Faculty drawn from respective disciplines.
- i) While opening centres for teacher training, training of administrative staff, other professional voluntary organisations who are in existence can be upgraded and given this responsibility through Government support. Monitoring and supervision have to be undertaken by the Rehabilitation Council and Department of Welfare, Government of India.

#### ICDS SECTOR:

The Integrated Child Development Services Scheme (ICDS) makes specific reference to the importance and need for early detection of childhood disabilities which includes detection of mental handicap. In order to achieve these objectives the following tasks are currently expected to be carried out by the Anganwadi workers, namely (a) Prevention of mental retardation through education of parents, (b) Early identification of mentally handicapped children. Supervisors and CDPO's are to be guide and support the Anganwadi workers in these tasks.

The 3 month job training of the Anganwadi workers currently includes approximately 6 hours of theoretical lectures on all types of handicap (sensory/motor/mental) and about 6 hours of field visits to various institutions catering to the above groups. Similarly the training of the supervisors includes about 4 hours of theoretical lectures relating to various disabilities and about 6 hours of field visits. With existing training, their knowledge and ability to detect mental handicap appears to be inadequate. Further inputs are also required to help them carry out educational activities in the community for prevention of mental retardation.

Home care of the mentally handicapped children receives very little or no emphasis both in the training of the functionaries or in their day to day work. In making the above observation, it is recognised that the Anganwadi worker cannot be expected to be the sole or even major providers of care for the mentally handicapped. It should be feasible however, to provide them with some inputs regarding home training for development of self-help skills which they could then be in a position to impart to the families of handicapped individuals. The above observations would apply in large measure to the supervisors also, with respect to their own training as well as day to day functioning.

A major requirement appears to be the strengthening of the skills of the functionaries at various levels. This can be achieved by increasing the inputs in their training schedule with special emphasis on identification, prevention and simple home training skills for mentally handicapped children. The details of the content and coverage of the training programme, its duration etc., could have to be worked out. As an immediate target, this training on the various aspects of mental handicap would have to be carried out by mental health professionals themselves. For this the training centres for the various functionaries could form a liaison with the nearest available mental health institution/professionals. The long term goal would be to train the staff of the various training centres themselves, so that over a period of time they could take over this aspect of training.

Monitoring and supervision are essential for the success of any programme. It is an essential component as far as the ICD is concerned, keeping in mind the level of education and training of the Anganwadi workers. It is therefore essential that the supervisors and child development project officers in the scheme also receive the necessary orientation to mental handicap. With their monitoring and support the Anganwadi workers would be better placed to carry out their tasks.

While it is envisaged that the supervisors and CDPO's are able to provide the first level care for the mentally handicapped children, such care may not be sufficient and/or totally appropriate in the long term. It is necessary therefore that the functionaries of the scheme develop

the appropriate liaison with health sector as well as with the District Rehabilitation Centres. Since the National Mental Health Programme (NMHP) recommends integration of mental health care with primary health care, and efforts to achieve this have already commenced in various parts of the country, in the long term all medical offices in primary care settings would be sensitised to mental health problems and would be able to provide the back-up services for the mentally handicapped. Liaison with the District Rehabilitation centres can facilitate the vocational training and rehabilitation of moderate and mild categories of handicapped persons and particularly the adult handicapped.

The committee in the RC have noted that the current need for man power in the ICDS Sector would be the level of

- i) Regional Centres (currently 3 RC )
- ii) Anganwadi training centres (about 100)
- iii) Support and supervision at the District Level (total 400)

It is possible to achieve them linkages between ICDS and DRC, ICDS and NMHP. In those districts where both DRC and NMHP are not operational as yet, it is necessary to provide for a district team with special training in mental retardation.

The short term goals (in the 5 years) would be to strengthen the RC's with a specialist in mental retardation and part time staff at the anganwadi training centres. In the long term there will be need for specialist personnel at the district for support, supervision and monitoring of care by the ICDS personnel.

#### District Rehabilitation Centre Scheme

In the DRC Scheme, the grass-root level workers and the multipurpose functionaries at village and block levels have been trained by RRTCs in prevention, early identification and care of the disabled persons including mentally retarded. Training has been imparted to multipurpose Assistants and Multipurpose Therapists to provide parental and guidance and counselling services, to highlight the need for early intervention, family participation, carry out the remedial measure and to conduct community awareness programmes.

In DRC, 12 professional members, three multipurpose functionaries at PHCRU and M.R. Assistants at block level at the ratio of 1:30,000 population have been appointed on a regular basis to provide comprehensive rehabilitation services for the disabled (Visually, mentally, locomotor and speech and hearing handicapped).

The VRWs in DRC scheme are mostly the Anganwadi workers. They carry out the functions of grass-root level workers in addition to their existing work-load. They are paid a monthly honorarium of Rs.50/-.

The programme of the DRC professionals have been planned in such a way that they attend the thrice a week mobile clinic, one day at PHCRU and one day at DRC. Besides this they have to do follow up services on individual cases, organise educational and vocational programmes with the help of functionaries at the block level.

#### Manpower Requirement - R.R.T.C.

- |    |  |  |
|----|--|--|
| A. | Training/<br><br>Support/<br>Supervision | At present RRTC is having 5 Master Trainers each representing one or two disciplines. Therefore there is a need to increase their strength by double for training, support and supervision.  |
| B. | Research                                 | The existing staff at RRTC are presently engaged in training the professionals, functionaries, village leaders, voluntary agencies, manual preparation and material development. Therefore there should be a research unit at RRTC to undertake systematic research studies. |

<u>Designation</u>	<u>Present No.</u>	<u>Future No.</u>
RRTC Master Trainers(Reader)		5
Trainers(Asst.Professors)	5	5
Research Assistants	-	5
Regional Co-ordinator	-	1

The specific needs at the RRTC for one each (at Asst. Professor level) from clinical psychology, special education counselling and statistics.

At the level of DRC, the need for manpower is to have one person each from psychology, social work and occupational therapy in addition to the existing district team. The over all growth of DRC's can be projected as 50 in 5 years and 100 in 10 years.

For such a growth the manpower required would be:

Required Manpower	5 years period	10 years period	Total
1. Doctors	50	50	100
2. Speech therapy and Audiology	50	50	100
3. Physiotherapy	50	50	100
4. Occupational therapy	50	50	100
5. Prosthetics & Orthotics Engineer	50	50	100
6. Senior Technicians	200	200	400
7. Social Worker	50	50	100
8. Psychologist	50	50	100
9. Vocational Counsellor	50	50	100
10. Special Educator	300	300	600
11. VRWs(1:1000) pop	10,000	10,000	20,000
12. MRAs (1:30000) pop	400	400	800
13. MROs	100	100	200
14. MR therapists	100	100	200
15. MR Technicians	100	100	200
16. Psychiatrists	50	100	100
17. Statisticians	50	100	100

Of the above 17 categories of staff, only 8,9, 10, 16, 17 are to be planned in addition to that planned as part of DRC-MPD programme.

It would be appropriate to recognise that some of the staff of mental health would overlap in areas with ICDS programmes and NMHP.

### Health Sector

Health care services, in the country are delivered, predominantly through the following three factors:

(1) The largest sector, catering to the needs of the majority of the population, particularly living in the rural areas, is the governmental health services, consisting of primary health centres, taluk and district level hospitals and the doctors and large numbers of para medical personnel working in their institutions. The services provided are preventive, promotive and curative services for simple and common ailments. In addition, this sector is responsible for the implementation of the various national health programmes like family welfare, Malaria eradication, universal immunization, TB and Leprosy control, prevention of blindness etc.

(2) The second major sector catering primarily to the needs of urban population is again under the government, and consists of the several medical colleges and other teaching hospitals situated in cities. They have various speciality and superspeciality services with facilities for specialized investigations and management. This sector caters also to the referred population from the rural areas.

(3) The third is the private sector consisting of allopathic general practitioners working in various towns and cities, large numbers of private nursing homes in bigger towns and cities and hospitals of various sizes and services run by different missionary organizations and voluntary organizations in both urban and rural areas. Both general and specialized services are offered by this private sector.

In addition, the above three sectors there are also practitioners of indigenous systems of medicine and various types of 'traditional healers'.

#### Voluntary Sector

Voluntary sector is the most 'unorganised', sporadic, and heterogenous of all the sectors, with differing levels of involvement in mental handicap care. The activities include providing purely organisational support to activities of other sectors, volunteers from the community serving the cause after a variable period/intensity of training and voluntary organisations by themselves taking up a cause and continuing with a structured activity. In the past the activities of voluntary sector has concentrated mainly on coordinating role between various voluntary and other agencies for e.g., FWMR, setting up and running the special schools and residential care, day care centres and vocational training centres facilities and early detection and home based intervention programmes.

The major limitations of utilising this sector are two fold, namely, problems in ensuring a basic level of care, and the unevenness in the 'coverage' or 'scope' of each organisation in the sector.



However, in the area of mental retardation, historically and for a long term to come, voluntary sector would be very important. It is important that this sector is looked at PARTNER IN CARE. Manpower development should include their needs as well. The main requirement of MPD are for training, support, supervision & purposes. More specifically,

- (i) special educators and trained staff, to run the special schools and residential care facilities of voluntary agencies.
- (ii) grass-root field workers trained in early detection
- (iii) primary facilitators for home-based training programmes.
- (iv) the training and supervision of the above mentioned categories of people, would entail availability of human resources in the form of medical supervision, psychological services, physiotherapist, speech therapists and occupational therapists, and
- (v) manpower is needed to 'orient' the various administrative personnel concerned with the voluntary sector towards mental handicap.

The man-power requirements for Innovative Approaches would be related to the different sectors of the society involved in the care of the mentally retarded persons. The common MPD needs are for training, support, supervision monitoring and evaluation. The key personnel are psychiatrists, clinical psychologists, psychiatric social workers, occupation therapists, speech therapists, statisticians and health educators. The location of the man power would be more at the training centres and referral centres, with the basic care being provided by the personnel of the respective sectors.

#### CONCLUSION

Mental Retardation is not just a medical problem. It is basically a social and educational problem. It requires an indisciplined approach in training the Mentally Retarded to the main stream of life for which not only growth of facilities for the retarded is necessary but the right kind of attitude and commitment are necessary for helping the retarded. We should move in these directions.



## DIAGNOSIS AND ASSESSMENT OF MENTAL RETARDATES

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### INTRODUCTION

In the discovery and identification of mental retardation, two major approaches are employed-medical and psychological. They differ in Orientation and examination content. The medical specialist is concerned primarily with etiology, physical characteristics and development, and sensory and neurological deficits. His attention is directed towards infectious diseases, malnutrition, metabolic disorders, clinical features, etc. which might further support other indications of mental retardation. In contrast, the psychologist is interested in identifying the present level of behavioural functioning, the factors affecting efficiency, their potentialities and personality, social and vocational competency, etc. Thus the psychological assessment includes measures of intelligence, personality, educational and social achievement, special abilities, aptitudes alongwith informal developmental material supplied by parents, teachers, social workers and other professional school personnel.

The evaluation procedure is thus a constructive step with a definite aim rather than mere labelling process for statistical or research purpose. Diagnosis needs to be complete as well as early. The chief components of complete diagnosis is full history, a complete examination, and administration of certain special tests.

### STAGES OF ASSESSMENT

Assessment in the field of mental retardation has over-emphasized the need to diagnose or screen the child initially. While it is important, continuous evaluation of the child during the teaching process should not be ignored as it would show his progress at various stages of learning. Accordingly, assessment in the mental retardation should necessarily be carried out in the following stages.

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- Stage 1: Initial assessment at the diagnostic level or screening level. That is, all the medical and psychological information is collected and compiled in a neat case study so as to arrange the information into a meaningful pattern.
- Stage 2: Physical Examination of the child.
- Stage 3: Psychological Assessment.
- Stage 4: Assessment for placement in educational programme.
- Stage 5: Assessment for vocational and community placement.

Each stage of a assessment will be discussed one by one as follows:

#### Stage 1 - Investigative Procedures

The case history is the first and foremost step and the most important diagnostic investigation in mental retardation. It should be taken from a reliable person such as the mother and should include a full family and personal history, developmental milestones, pre-natal, peri-natal and post-natal history. Any abortions or still-births in the mother, any consanguinity between the parents, any other similar cases in the family, the age of the mother at conception should be inquired into:

A history from the time of conception to birth should include any diseases, any treatment given, any X-rays or screening done, any bleeding, vomiting, any attempt at abortion and the duration of pregnancy at which any of these occurred. Any possible adverse factor may be important. Many diseases can harm the fetus while producing almost no disease in the mother. Later history should include any disease or injury (especially head injury), infections (especially of the brain), diarrhoeas and any other severe disease. Immunization is important in preventing many diseases and a history of this should be included. A developmental history is most important in fixing the time of onset of mental handicap and thereby sometimes indicating the cause which may have acted at that time. It also shows the degree of handicap. When did the child do anything compared to the time that an average child does the same thing? Not only motor milestones but language and social behaviour of the child are important in diagnosing the level of handicap. How does the child react

to the surroundings-his mother, food, toys, friends, etc. ? What are his language responses ? If a child was normal at the time of birth and after a certain sickness had delayed development, it could indicate that the disease caused the handicap. However, some genetically transmitted degenerative diseases may behave in this fashion. So the doctor needs to take all factors into consideration for a correct and complete diagnosis.

Mental retardation is a most perplexing and disturbing problem in front of a paediatrician. Whenever parents come with their children complaining that child had not started to sit, stand, walk, talk and understand, then paediatricians are confronted with particular unhappy tasks. One of the most disturbing thing is the need to inform the parents that this child is handicapped by some permanently disabling condition. Emphasis is placed on the medical specialist's contribution as he is the person who usually first informs the parents or who is responsible for the final information to the parents. When the parents learn that their child is mentally retarded, it is a revolutionary experience to them. Parents go through four phases: (a) Shocking phase, (b) Reaction phase, (c) Adaptation phase (Recovery phase), and (d) Orientation phase. The length of the phases and their intensity varies with different people and can oscillate between the different phases. The parents need emotional support, medical and social information, and psycho-therapeutic help. All the requisite information should be given to both the parents without delay, it demands plenty of time, seclusion and repeated contact. They must feel secure that everything that is medically possible is being done for their child.

#### Stage 2 - Physical Examination

A full physical examination of the child is the next step. Often this omitted or done very perfunctorily. It should be complete and include a full testing of all systems-Vision, eye muscles and hearing. The nervous system and the neuro-muscular system involving movement are the systems most commonly involved. The importance of full testing is for initiating treatment as early as possible. In the rare cases of metabolic or hormonal disease such as

cretinism (due to low thyroid hormone) or galactosemia ( a metabolic disease) in which early treatment can prevent mental handicap, it is imperative to make an early diagnosis. Early treatment includes physiotherapy and physical rehabilitation. Early institution of all corrective therapy is most necessary for preservation and development of maximum function. A minority of children will need further tests. These include X-rays of the skull, EEG, Examination of urine and blood for metabolic or endocrine disease, examination of biopsies and cerebro-spinal fluid. PKU is an unborn error of aminoacid metabolism. Products of metabolism may be deposited in the brain and cause mental retardation if not diagnosed early.

Pre-natal diagnosis is now possible for many of the metabolic and chromosomal disorders such as Down's Syndrome and a few rare genital abnormalities of the brain by examination of uterine fluid from the pregnant woman. This technique is called amniocentesis. If an untreatable condition is found, abortion may be advised. Virus infections may also be diagnosed by culture of this fluid. This fetal head can be measured by ultrasonic techniques.

A good case history, complete examination and painstaking developmental evaluation is all that is needed in almost all such children in order to give a diagnosis on which the management and training of the child for the full development of his potential should be based.

### Stage 3 - Psychological Assessment

This is necessary for every child and should include psychological testing based on tests applicable to the background and bringing up of the child. A full psycho-social evaluation is necessary to gauge the child's potential.

Most of the conclusions for the retarded persons' potentials have been derived from IQ tests designed to measure

higher mental functions which are usually standardized on urban and School going population. It has been observed by investigators that IQ scores, while of value in assessing the potentials of academic performance of average middle class individuals, fail to provide the most useful information in screening mentally retarded persons. The complexity of the instructions and abstract nature of the tasks make the mentally retarded child fail to understand the test. Thus, such tests in the case of mentally retarded become a measure of what a retarded person cannot do than what he can do. If tests involving tasks more at concrete and behavioural level were devised, it would provide scales for a more reliable and valid measurement of the potentialities of retarded persons. Children who have not had the opportunity to read widely or to acquire verbal facility may always be at a grave disadvantage on IQ tests. IQ tests are basically tests of learned ability, not tests of mental capacity or potential. IQ tests are not perfectly accurate nor are they perfect indicators of potential.

Consideration of intellectual deficit as the sole criterion of mental retardation has been challenged by many workers in the field. Social functioning is perhaps as important as (if not more than) the intellectual performance and this criterion of social adaptability serves a better purpose for the practical management of the mentally retarded. The concept of mental retardation should, therefore, include the dual criteria of low intellectual functioning and impaired social adaptation as per AAMD definition.

Some pioneering efforts have been made in modifying western intelligence tests to suit Indian conditions at various centres and Indian norms have been made available for them. Psychological appraisal of the handicapped has always presented challenges. Goel (1981) has depicted a global picture of the problems in the usage of psychological tests with mentally retarded. In this paper various

factors, viz., age, time, motivation and attitude, bias in sampling, contents of tests, inconsistency of IQs, etc. which affect the assessment have been highlighted. Some difficult and serious problems in administration of tests to hyperactive children (who are unmanageable and uncontrollable) are also discussed. Volatile temperament, of retarded children, strangeness and artificiality in testing situation are some of the factors which affect the reliability and validity of tests. All tests cannot be applicable in the case of mentally retarded. Specific norms, reliability and validity of the test is a must for generalizability.

#### Stage 4 - Educational Assessment

While psychological assessment prepares the ground for teaching and training of the child, educational assessment should direct as to how and in which areas child needs be trained. For this work, teaching tasks and other activities need to be designed. May be a teacher has an operational curriculum whereby she assesses the level of the child in 3 R's so that she proceeds further in teaching what the child does not know. Similarly a child may be exposed to different task situations and assessment may be made in terms of his ability to comprehend instructions and ability in carrying out the instructions. This would enable one to judge whether the child can perform simple tasks and is ready for learning complex tasks or not. This would also facilitate in prescribing certain other tasks in order of difficulty. Once the tasks in terms of academic skills and work skills are located assessment at this stage does not end. As a matter of fact a periodic assessment is required in order to know what improvements a child has made in the areas in which he was learning skills. If it is found that the child has not made any progress, programme evaluation is necessary. That is, instead of finding fault with the child, it is better to scrutinize the training programme



of the child. This kind of evaluation would enable the teaching personnel to know whether prescribed training programme was suitable for the child or not.

**Educational Tests:** Since the majority of children referred to school psychologist for intelligence testing are directed because of poor academic performance, an assessment of the School performance is at least as important as an assessment of intelligence. A test of educational achievement is one designed to measure knowledge, understanding or skills in specified subjects. By achievement test, we mean those tests that measure the attainments or accomplishment of an individual in a particular branch of knowledge or some branches of knowledge after a definite period of training & learning. Educational age is obtained as a composite score of different subjects which represents the general achievement of an individual. Educational Quotient is the ratio of educational and chronological ages multiplied by hundred. But the Achievement Quotient is the ratio of educational and mental age multiplied by hundred.

The extent to which educational testing should be applied will depend much on the use made of the findings. An important aspect of such investigation is to ascertain the degree to which the patient is capable of using his attainments. More profitable from the point of view of assessing capacity for social functioning is an investigation of how far an individual is able to make use to meagre school knowledge and how far and in what way, he has been able to overcome his educational shortcomings.

The examination should, therefore, include both a standard test of reading, comprehension and the language arts-the most crucial area of instruction in all the subject matter fields. Whenever a child is suspected of low intelligence, there may well be confusion about whether he is incapable of learning to read, whether he is ready to learn to read or whether his low performance in reading may be due to specific identifiable skill deficiencies. There are tests which can be used in a test battery. An example of a readiness measure is the

Harrison-strand Reading Readiness profile. 'School Readiness Measure' prepared by Muralidharan (1975) is also used for the purpose. A reading diagnostic scale 'Durrell Analysis of Reading Difficulty' measures specific strength and weakness in the reading skills. It can be given to children whose reading achievement and skills are as high as sixth grade. It is an excellent scale yielding highly informative results. Reading is the function of the brain. It is an elementary neurological process in a direct continuum of other developmental process like sitting, walking, running, talking, etc. which develop before the school going age. Reading is a complex network of cognitive processes. It requires the child to use visual, auditory and motor skills to recognise words and symbols to associate them with sounds. Gradually he supplements the sight and sound approach by sequence, structure and sense. It is of paramount importance to identify at an early age why a child is failing to learn. Effective screening should be carried out during the first year of school by teachers and doctors and this certainly requires the construction of a battery of tests. Medical case history should include history of speech and motor development, child's articulation, language and motor-coordination. Cases of uneven development could be presented for complete neurological and psychological investigation. The need of early identification to avoid years of frustration describes the assessment procedures to consist of teacher's day to day records of sensory functions, motor functions, behavioural problems and psychological evaluations, reading, and spelling tests, visuo-perceptual functions, laterality and right/left confusion. Visual impairment associated with reading disability range from severe to minimal. The child may have difficulty in differentiating letters in alphabet. He makes crazy errors in spellings, guesses and fudges while reading aloud. The look-say method is a disaster for him. He needs phonics and tactile perception through writing. He has special problems with letters which have rotations and reversals e.g. bd, pq, MW.

Bender Gestalt is a useful and simple test of detecting this type of disability. The most critical instructional area for the School is the broad area of language arts. The Illinois Test of Psycholinguistic Ability (ITPA) has elicited substantial number of studies which give information not only on related language process but also on possible uses of test itself in the diagnostic process with retarded children. The ITPA has nine sub-tests which cover three dimensions of linguistic process:

- a) Communication butput and input
- b) level of organization and
- c) psycholinguistic process

A virtue of the scale is its continuity with educational diagnosis; most scales help classify children which do not develop data of direct instructional value. Other language tests found to be useful with the retarded are Wepman's Auditory Discrimination Test and Mecham's Verbal language development scale.

**Interprofessional Contacts:** Psychologists are important members of the evaluation team. Unfortunately, their pre-occupation is with psychometrics. Since the IQ is still a significant index of the potentialities in terms of cognitive functions like attention, concentration, perception, memory and ability to profit from past experience. The fact, however, is that the finding of the psychologist should be meaningful to the teachers who are to use them to help the child. This implies that the psychologists and the teachers must develop a functional language mutually meaningful. This should receive attention during training. No instructor in psychology who has not worked with other professional

people responsible for providing the services for handicapped can give such training to students. This calls for inter-professional contacts. It is an established fact that psychological tests have their limitations and there is not a single perfect flawless testing instrument. So until a perfect diagnostic instrument is devised, we must be content with that we have and make the most of it. However, there is a growing awareness about the coordination of the various disciplines of neurology, psychology and education to join hands in the diagnosis and identification of reading disabilities. It is felt that another pair of hands to be joined in and that is of the parents. All the personnel should be able to speak a common language. The communication barrier between professional people is a big deterrent to develop meaningful programmes for the retarded. The interdisciplinary approach is very productive and will facilitate free communication between professionals and help dissolve hierarchical barriers which are the bane of most of our programmes. The team work could be of utmost value in designing the instructional material and techniques for improving learning potentials of retarded children. It is necessary for special teachers to have basic skills in the areas like speech therapy, occupational therapy, social work, counselling psychology, etc. so that they can function as prescriptive teachers. The very purpose of making the teacher a vital and effective resource person will be defeated if he/she is not given a professional status. This can only be accomplished if they are treated as specialists and are given monetary incentives.

Problems: It has usually been found that training programme is not arranged according to retarded child's potentials and interests. If the learning task is a difficult one and the child is functioning at simpler level, it would create frustration in him. Similarly if the task does not interest the child or the task does not have attention-getting properties, it is likely that the child will suffer from boredom and may show withdrawal tendency

or may disrupt the activities of others.

It has also been observed that the professionals find continuous evaluation very boring and tiresome. "What is there to evaluate everyday in the child" ? This attitude deprives one to know when the change has occurred in the child. And if one has not noticed the change how is one going to decide to teach the next new thing or modify the programme if it has not done any good to the child. A feedback always helps in any scheme of work.

#### Stage 5 - Vocational Assessment

In providing services to the mentally retarded, the modern trend aims towards the effective placement of mentally retarded into the community. The training and educational programmes which have to be provided to them should aim at this objective. So, in the curriculum programme some of the pre-vocational and vocational aspects should be included. Such attempts are effectively practiced in other countries like Denmark, England, USA and Japan. In India such attempts have rarely been made. For the effective vocational placement of the normals standardized tests of aptitude and interest are used. Most of these tests are complicated and involve the use of intelligence and hence cannot be effectively used on the mentally retarded population. At present, there is a need to select a battery of vocational interest and aptitude tests which are simple and effective with the mentally handicapped individuals. The successful and effective vocational performance depends upon combination of skills. The types of skills required are: basic cognitive functions, psychomotor coordination, good sensory function, dexterity, speed, social and emotional adaptability and the basic intelligence. To test these capacities, the following battery of tests may be used:

(a) Tweezer Dexterity Test, (b) Minnesota Rate of Manipulation Test-Placing and Turning, (c) Hand Dynamometer, (d) Finger Dexterity Test, (e) Binet-Tool Dexterity Test, (f) Reaction Time Test, (g) Speed of Tapping Test, (h) Intelligence Test (Binet-Kamath) and (i) Emotional and

personality test. This battery of test shows a potential for being used in planning pre-vocational and vocational placement of the mentally retarded persons. The motor coordination tests and reaction time test have high correlation with the vocational efficiency. The effect of personality and emotional disturbances do need to be studied with great care.

Since the assessment at this stage relates to the placement of the retarded individual in the community in a gainful occupation, this calls for highest possible adaptive functioning on the part of the retarded individual in terms of employability and adequate personal social habits. Gainful occupation means not only proper utilization of time but also becoming economically self-dependent. In this way he becomes a full-fledged member of the society who not only gains from the society but also contributes to it. The ability to occupy gainfully also means potentials to be employable. It is this characteristic of employability for which assessment should be made. In order to assess a person's employability, the characteristics like Workability, Placeability and Adjustability should be evaluated which go to make a retarded person employable. Workability means ability to utilize learned work skills, working with attention and concentration, working with speed and accuracy, and maintaining quality and consistence in performance.

Placeability means ability to behave in work and social situation properly with adequate personal social manners like dressing adequately, making proper communication, not showing any behaviour problems and ability to receive comments and criticisms well.

Adjustability means to be able to work in cooperation with fellow workers and supervisors in work situation to the satisfaction of the employer.

It would be advisable to assess the retarded individual according to the job he is to go in because workability and placeability characteristics differ from job to job. Apart from employability characteristic there are other positive characteristics which make a retarded persons placement in a community successful.

This is a very important stage of assessment in the field of mental retardation which needs to be handled very carefully. The problems usually arise when (i) the retarded take employment without developing enough employability characteristics, (ii) the retarded persons take up a job for which he does not have a workability potential, and (iii) he gets into employment situation and his behavioural problems and maladaptive habits have not been taken care of. These mistakes not only lead to frustration on the part of retarded individuals but also cause disturbance in the work of others.

It may also be noted here that one of the crucial roles in the whole process of assessment of the mentally retarded persons seems to depend on parents' awareness, understanding and courage to realize and pick up suspected child for assessment as early as possible. It has been observed that although parents are not a member of the professional team, their contribution is very important in making any evaluation meaningful.

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## EARLY IDENTIFICATION OF EDUCATIONAL PROBLEMS

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The fundamental purpose of a psycho-educational assessment is to gather representative data to use in formulating remedial programmes for the child. The teacher's role in this process should be that of identifying the learning problems of a child, through informal tests and observation, developing strategies for educational programming based on the observation and tests and reassessing the child to find out progress. There are a few principles/steps to be followed for the systematic assessment of the child.

### Principles of assessment:

An ideal psycho-educational assessment should comprise the following four steps (Smith, 1974) : (i) Identification procedures; (ii) Evaluation techniques; (iii) Development of an educational plan and (iv) Implementation of teaching strategies.

### Diagnostic Teaching Flowchart (SMITH)

- |           |   |
|-----------|---|
| Level I   | Children with suspected education problems, i.e. those that exceed the usual expertise of most regular class teachers, are identified as potential high risk youngsters and referred to some type of diagnostician. |
| step      |   |
| Level II  | Evaluation of the child's educationally relevant characteristics and the prominent environmental traits that may in some way be associated with obvious or suspected educational problems.                          |
| step      |   |
| Level III | Development of a comprehensive educational plan for the child - one that is based on diagnostic data that have been gathered about him and about his environment.   |
| step      |   |
| Level IV  | Assignment of the child into the most suitable instructional environment as suggested by the educational plan which was generated at Level III.   |
| step      |   |

### Identification:

As mentioned earlier, this step involves general screening to spot the children with learning problems. Individual teachers or parental referrals are also considered for identifying children with problems in learning.

### Evaluation:

In this phase, more intensive assessment is carried out using specific evaluation tools including psychological and educational tests. By this the specific problems of the child are noted. Ideally, this step in assessment is carried out not in the sitting but through a few days, under different circumstances.

### Development of Teaching Plan:

After gathering assessment data, a teaching plan is developed in this stage, based on the analysis of the data collected. It is very important that care be taken in using the assessment data appropriately for forming the educational programme of the child with long term goals and short term objectives.

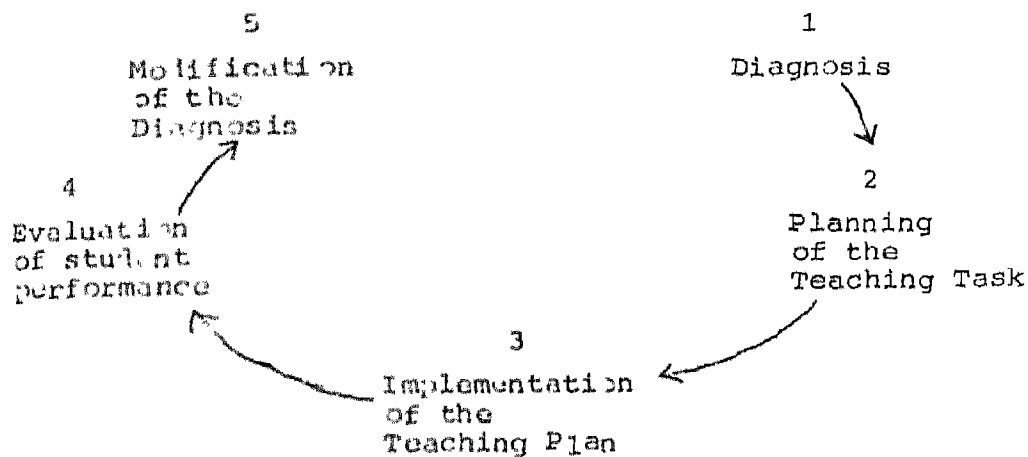
### Implementation:

The plan developed in the earlier stage is put into practice in this step. Children who have minimal learning problems might benefit from the resource room setting for implementing the teaching plan. This applied to borderline, EMR and learning disabled children. On the other hand, children with severe learning problems will need special class setting for the academic work. The non-academic activities can be programmed with normal children which will lead to social integration. However, the primary emphasis in the present phase should be on the remedial strategies for helping children and to integrate them with normal children to the maximum extent possible.

After implementation the children need to be reassessed to check for the progress and the success or failure of the plan that is developed and implemented. Therefore, the teacher must have a periodic assessment

schedule, which is also called as continuous assessment. For this purpose Janet Lerner has developed a cycle called Clinical Teaching Cycle. As we see in the diagram, assessment is not an end in itself but is continuous and on going.

DIAGRAM OF THE CLINICAL TEACHING CYCLE



Characteristics of Accurate Assessment:

An accurate psycho-educational assessment should give the following details regarding the child:

1. Should identify the subject's learning characteristics; style of learning and strength and weaknesses.
2. Should help in understanding the personality dynamics which leads to the setting up educational programme.
3. Should precisely classify the child as mentally retarded, learning disabled, emotionally disturbed and so on.
4. Should aid in homogenous grouping.
5. Should assess the progress and prognosis.
6. Should facilitate identification of educational readiness and appropriate placement.
7. The administration and scoring should not be too complicated to be used by the teacher.

Guidelines for Accurate Assessment:

1. Each assessment technique has distinct advantages and disadvantages when used with different types of children in different situations and therefore the best method is to employ a variety of assessment techniques.
2. As teacher has a major role in the assessment process there are certain desirable traits for the teachers. These are emotional health and stability; good sense of humor; flexibility; ability to relate well to people; orientation of test results in problem solving and sound theoretical orientation.
3. The assessment must be done periodically as such continuous assessment results provide the teacher with evidence of successful instructions or faulty learning.
4. As the primary purpose of educational assessment is to directly use the results in teaching programmes, selection of inappropriate tests must be avoided, results must not be over generalized and care must be taken in interpreting test results.
5. All the factors related to the child's learning problems such as physical, psychological, social socio-economic, cultural and environmental factors must be taken into account while assessing or taking the help of related services. This helps the teacher in recognizing the interfering factors in the home and neighbourhood and plan for the child accordingly.
6. Certain precautions must be taken while administering psycho-educational assessment. This includes, (a) training of the 'one' who assesses; (b) avoiding misinterpretation of test results; (c) confidential data of the child and family must not be used inappropriately; (d) the child's attitude towards testing such as anxiety, submission, resentment and perplexity must be considered; (e) using the same test too often for all children must be avoided.

As far as possible tests developed for Indian children must be used.

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## CURRICULUM FOR M.R. CHILDREN

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The curriculum for the mentally retarded should be planned. The content should be such as to achieve maximum development in minimum time, keeping in view the practical and useful things the child has to learn. We must remember that usually the trainables come to us at a late stage after going round various schools and clinics after suffering much frustration and we have less time to help the child.

The most important thing is that the curriculum should suit the needs and abilities of the child. The teacher must be resourceful and take the initiative to provide a well balanced programme with a wide variety of activities suitable to different levels of ability and/or age. The curriculum plan best suited to one teacher or one class may not fit the other.

### Elements to be Covered by Curriculum:

1. Language development.
2. Motor Control
3. Sensory training
4. Social studies
5. Arithmetic concepts
6. Self-help
7. Socialization
8. Science concepts
9. Music
10. Dramatization
11. Practical art and crafts
12. Mental development
13. Health and safety
14. Occupation skills

The teacher should workout details of lessons, covering the above mentioned areas. The following are some guidelines which can be altered to suit a given class-room situation. They are only suggestive and not exhaustive.

## I. LANGUAGE DEVELOPMENT

### 1. Speech drills:

Teacher to make the child repeat a word or sound to practise it

Teacher to show the child how to use the mouth or tongue to pronounce a word or sound

To blow bubbles or blow into his hand to feel the "wh" sound.

To make the child reproduce animal or insect sound or bird cries.

To show pictures and ask what sound the animal or bird in the picture makes.

To point out how different names of children begin with certain sounds.

### 2. Talking and sharing time:

To tell what they had for breakfast or lunch

To tell what they are going to do on reaching home.

To tell what happened on their way to school.

To tell what they saw at the circus or picnic or outing.

To encourage conversation by asking questions  
(sharing time)

To show something brought to class, explaining about it.

To share sweets or food brought to class.

### 3. Writing:

To practise making lines or circles

To trace over letters written by teachers

To practice letter-forms and pencil controls by copying words.

To write alphabets, words dictated by teacher from a book.

To write his own address.

4. Reading:

- To find his own name in a card
- To raise his hand when his name is written
- To read names of other boys in the class
- To find own name on book, towel etc.,
- To read dates and days from the calendar
- To find a word that goes with a flannel board picture or match any word to a picture.
- To read labels on objects or bottles etc.
- To review the words from common signs like "Exit", "Danger", "Women only".

5. Story Period:

- To make the child repeat in his own words a story with gestures or using flannel board characters.
- To ask the child what comes next in a story, or ask questions about what happened.
- To give a picture and ask him to tell a story.

6. Roll Call:

- The child to answer "Here Sir".
- To tell who is present or who is absent
- To give his own name and address
- To sing prayer song or National Anthem.

7. Listening Skills:

- To tell children how to listen carefully
- To ask them to sit up straight and sit quietly so that they can listen.
- To ask them to listen as one child reads something to see if they could hear or if it was read correctly.

8. Spelling:

- To tell how to spell a word
- To ask the child to spell his name
- To use cutout letters to make the words

9. Reading pictures:

To name objects in pictures, telling what is happening

To answer questions about the pictures in a book or magazine.

To tell about a series of pictures mounted.

To tell about pictures on puzzles or on a matching card.

To identify children in a photograph

To underline the right picture in a series, as the teacher names it.

II MOTOR DEVELOPMENT:

1. Games:

Ring toss game

Roll a ball to knock down blocks

Beanbag toss and catch

Blindfold games, where one child has to guess who touched him or who called his name.

Musical Chairs.

2. Skills:

To throw and catch balls

To aim and shoot targets

To ride a bicycle

To jump for height or distance

To learn the correct way to walk, run.

3. Manipulative Skills:

Arts and Crafts

Glue or paste

Model clay

Do loop weaving

Lace the edges of objects or scrapbooks

Fold papers.



4. Manipulative Toys:

Pegboards, puzzles, nut and bolt sets  
Boards to string  
Play with blocks  
Hook together parts of a train, trucks etc.

5. Games:

Ball or beanbag games  
Play with a rope  
Shooting the target

6. Equipment:

To manipulate scissors and papers  
To use paper-cutter  
To put pieces on a flannel board  
To polish shoes  
To use sandpaper correctly

7. Free Play:

Teacher suggests something for the child to do  
part of the class has free play.

8. Exercises:

Teacher leads in a series of exercises.  
Do exercises to a song or verse.

III. SENSORY TRAINING:

1. Colour discrimination:

To tell about the various colourful things  
in the class  
To name the colours  
To match the colours with the dress worn  
or a puzzle.

2. Visual discrimination:

- To copy words from a book
- To copy a pattern the teacher is building.
- To put a finger on something asked for in a picture.
- To compare two objects in shape or size
- To colour the inside of the shapes
- To compare work with a model to see if done correctly

3. Auditory discrimination:

- To listen to music to know when to start the singing or action.
- To listen for the change in the music so that the action may also be changed.
- To compare different sounds made by animals, instruments etc.

4. Training Other Senses:

Spatial Relations

- To learn right and left, up and down, big and small
- To learn different directions
- To figure out-eyes, nose, mouth etc., in a picture

Sense of Touch:

- To feel objects to judge the size, weight, etc.
- To differentiate between softness and hardness
- To differentiate between various types of sand papers.

IV. SOCIAL STUDIES:

1. Home and Community:

- Teacher to feel about a good citizen
- Use dramatic play to learn how to cross streets, to visit stores and other games facilities.
- To learn about different kinds of stores
- To talk about parks and other recreational facilities
- To talk about Newspaper, Radio, Cinema
- To tell the members of the family and their duties
- To learn about policeman, Postman, milkman, etc.

2. Transportation:

To use pictures and charts of different articles  
To talk about them in detail

3. Month, day, weeks, names and concepts:

To tell names of days and months  
To discuss about the days in which they come to school.  
To discuss about the days in which they have holidays, festivals etc.

4. Conservation:

To tell them not to harm animals, not to destroy plants.  
To handle things carefully without breaking them or destroying them.

5. To Learn our names and address:

The child should tell where he lives including address correctly.  
The child should write where he lives including address correctly.

V. ARITHMETIC CONCEPTS:

1. Numbers, Concepts of amount

- Use Picture cards with numbers or groups of objects
- Introduce one number each day
- Review what they have two of such as hands, eyes, etc.

Simple Counting:

- Relating counting to the ideas of "how many"
- To count on fingers.

The Shape of numbers:

- To tell what numbers are in the cards
- To read numbers off a chart.
- To associate a number symbol with an amount
- To tell the concept of sequence; what number comes next
- Addition and subtraction-by using objects on a flannel board.
- Concept of size; Big or Small.

2. Clock and time
3. Calendar numbers: To find holidays, birth days etc., correctly.
4. Measurements: Temperature, height, weight
5. Money: Values of different coins, currencies
6. Age.

VI Self-Help:

- a. Social Techniques: How to say 'Thank you' 'Please',  
"Good morning".  
"Namaste"  
Table manners
- b. Respect for the property of others.
- c. Sharing materials like paper, crayon or games materials and toys.
- d. Taking turns.
- e. Getting along with people
- f. Helping the teacher and others.

VII SOCIALIZATION:

- a) To get along well in the home and in the neighbourhood.
- b) Developing language, sharing with others, waiting for his turn, obeying and following directions, sensing the feelings of others, and other aspects of interpersonal relationships, especially those concerned with daily associations.
- c) An intangible type of development which comes about through recreational play, singing, dramatics and working and living with others.

VIII SCIENCE CONCEPTS:

- a) Nature Study: Visit to a farm, Garden and Zoo, To take care of Plants, Pets.
- b) Weather: Various Seasons
- c) Electricity, Fire, Water etc. of Common Use.

IX MUSIC:

Individual singing or group songs  
with Instruments and without instrument  
Sense  
Clapping and Keeping time  
Sense of Appreciation

X DRAMATISATION:

1. Using gestures
2. Acting out a story or a song
3. Dramatic Play with toys etc.
4. Puppetry
5. Shadow Play

XI (PRACTICAL) ARTS AND CRAFTS)

Colouring, Drawing, Painting  
Woodwork, Pasting and Cutting  
Crafts objects with colour paper, cloth.  
Practical  
Cooking  
Sewing  
Washing  
Cup-tea  
Setting the table, serving

XII MENTAL DEVELOPMENT:

1. Creative
2. Memory
3. Imagination
4. Concept building
5. Problem solving: To make judgement  
based on giving reasons
6. Following directions given by teacher.

XIII HEALTH AND SAFETY:

Food : (Water, Vegetable, Cereals)

Rest :

Immunisation and disease

Sanitation

Safety: While crossing the road,  
While handling fire, with electricity  
Knife, glass.  
Correct Posture

XIV OCCUPATIONAL SKILLS:

1. Planning for the days work  
To allocate each child some job.
2. Learning to use tools, brushes, knife, etc.
3. Work habits.  
To work silently to finish the work given  
Taking care of the materials  
Cleaning up the table at the end

FINALLY

PARENT- Teacher Co-operation is an important factor for the child's development. The parents should furnish as much details as possible about the child so that the teacher may know the potentials of the child and plan accordingly. This will further facilitate the teacher in parental counselling. Where ever possible, the teacher should help the parent, especially the mother, in getting some training to handle the child at home.

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EDUCATION OF THE MENTALLY HANDICAPPED

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1. Introduction

In recent years there has been a growing interest in the field of Special Education. Interest in the handicapped child, from a research point of view, has stimulated investigation into almost every area of development. In education, research programmes have been designed to make available the most improved methods and techniques of prevention, the curriculum, psychological evaluation is much more specific. The psychological tests are sharper instrument to detect every source of achievable potential. To put the multi-disciplinary approach into action, it is agreed that the disciplines like medicine, psychology, occupational therapy, speech therapy, social work, special education-should demonstrate how their professional expertise related to the teacher in the class, and how the teacher can detect a child's difficulties so that the appropriate professional could be enlisted in the care, education and treatment of the child.

The awakening of society to this problem of mental deficiency will form an important step in the planning of education for the mentally retarded. The education of mentally retarded has to have overtones of vocational training with ultimate rehabilitation as its goal. It has to be an integrated education-rehabilitation programme in continuum. Since the cultural and material needs of society will be constantly changing, the pattern of special education and vocational rehabilitation will also have to change accordingly. Provision of finances or services will not solve the problem. The mentally retarded require genuine public understanding and acceptance. The community has to create an atmosphere for acceptance.

A mentally retarded child, it is agreed on all hands now, needs to enjoy the fundamental rights of existence, care, education and other opportunities for intellectual, emotional, social and occupational adjustment in his family and outside as much as any normal child. It has been realised that mentally retarded are like any of us in many respects and have a right to education, work and employment. Thus their right to be responsible citizens has now been accepted and this acceptance is now held as a hall-mark of the cultural advance of any society. To effect this thinking in practice, it is necessary to make special efforts to educate, train and employ the retarded at the level of their ability. This has to be done not out of pity and sympathy for mentally retarded but as a result of practical recognition of the fact that the use of abilities of mentally retarded will be beneficial to the society and the nation. The developed countries, after having seen an undesirable result of their clinical and advisory services, have now started realizing that the concentration ought to have been on community based services and primary health centres. But it is very important that in a big country like India, concentration must be in the rural areas and community based services on a large scale are very much required. One can learn lesson from the mistakes of the Western Countries in the field of mental retardation. In the Indian context it is necessary to emphasize preservation of the families because the mentally retarded can be managed better at the level of the family and community.

No doubt, it is difficult to assess the magnitude of the problem but it should not dampen to work for their welfare. The mentally retarded in whatever number or form they exist like every other citizen of India have a fundamental right for their training and proper education in addition to their proper maintenance and up-keep. They ought to be enabled to stand on their own legs and be not left to become parasite on society. This glomy picture, however, has a silver lining as according



to IQ distribution, around 75% of the retarded are known to be only mildly retarded, another 20% moderately retarded and only 5% beyond any hope who need custodial care. The burden of the retardate falls not only on the parents but on the entire nation. If the upward trend of incidence is not checked, the entire economic structure of the nation may crumble down. It may also adversely affect the smooth social and cultural growth.

Questions are often raised that when adequate training and education are not available for the normal youth, why educate the mentally retarded and why make the facilities for vocational and institutional training available to them ? Only by heightening community awareness of this social problem through education and communication to the public, this view could be changed. In India, several conferences, meetings and seminars have been held, many commissions have been appointed, many recommendations have been made and "White papers" have been issued. In all these meetings there was a move for better residential and day care facilities, provision for special schools for the mentally retarded and special classes in regular School systems. The country is now moving in the direction of integrating the education of the mentally retarded with that of normal children. Integrated Education of the Disabled (IED) is one alternative which is going to be very helpful in serving a large number of such children all over the country. The Government of India initiated the scheme of IED in 1974 which was modified in 1981. Hundred percent financial support from Central funds is available to all the States and Union Territories implementing this scheme. The programme is gaining momentum in pursuance of National Policy of Education 1986 which envisages education of disabled children in common Schools as far as possible. The programme has assumed further significance due to the nation's commitment to expedite universalization of elementary education in the seventh five year plan.

## 2. THE TWO GROUPS (EMR AND TMR)

For educational purposes two fairly distinct groups may be made within the broad Category of the mentally retarded. Although the differences which characterize these two groups are of degree rather than kind, they are nevertheless educationally significant. These two groups are (a) The Educable Mentally Retarded (EMR) and (b) The Trainable Mentally Retarded (TMR). An educable child is characterised by academic retardation rather than by emotional or behavioural problems. The reason for his retardation may be with him, with the teacher, with the school system, with the family or with two or more of these. It is necessary to determine the relation between his mental ability and School achievement. The EMR fall in the IQ range of 50-55 to 70-75.

A trainable child is one whose social prognosis is sheltered living, such living may be in a sheltered workshop, an occupational centre, a sheltered job within the community, a residential facility or the home. The important consideration is that these children will need some type of supervision for their entire lives. It is also important to note that the presence of central nervous system (CNS) pathology is the rule rather than the exception with this group. The TMR fall in the IQ range of 25-30 to 50-54.

In the case of EMR, the rate of development is only a half to three quarters that of ordinary children. In the case of TMR, the rate would be a third to a half that of the average child. All this implies that the intellectual gap between the normal and mentally retarded child, which exists at birth or soon thereafter tends to increase with age and is permanent and largely irremediable. This must be realised and accepted by parents and teachers alike if positive attitudes to the problem are to be developed.

### 3. CHARACTERISTICS OF SLOW LEARNERS (BORDERLINE)

This category of mentally deficient persons who are called borderline or subcultural normals or slow-learners have a mental age from 8 or 9 to 11 or 12 and children have an IQ that falls approximately in the 70 to 89 range. This group of pupils presents a serious and difficult problem to schools because they constitute a large segment of the School population (18%) and are capable only of poor quality, slow and limited School achievement. Their characteristics as far as schooling is concerned are :

- a) Their ability to deal with abstract and symbolic materials (language, number and concepts) is very limited.
- b) Their reasoning in practical situations is inferior to that of average persons; their attention span is relatively short; they are unable to interrelate a series of instructions or elements.
- c) They are unable to deal with relatively complex games or School games.
- d) They must be provided with relatively small units of work of simple type; they require much more supervision than do more capable pupils; they require much external stimulation and encouragement.
- e) Their understanding of rules of conduct in play and other social situations is inferior to that of average individuals.
- f) They are appreciably retarded in School achievement. Their work is slow and is of inferior quality.

### 4. EDUCATIONAL PROGRAMMES FOR THE M.R.

Mental retardation is not primarily a medical problem. It is an educational, psychological and social problem. It is thus the responsibility of the educators

who should help in formulating and putting across various ways and means by which the retardates can be gainfully educated and contribute their mite to the society.

#### 4.1 Educational and Service Delivery Options :

Many approaches have been put forth in educating the mentally retarded. The prevailing trend in this respect is to provide the mentally retarded children with an integrated educational system wherein they are able to study along with their normal counterparts, attend the Schools which the normal children do, and become socially and academically productive individuals. When considering educational options for the retarded, it is important to keep in mind that (a) educational placement should be based on the child's needs; (b) the child should be placed in the most facilitative (or least restrictive) environment; and (c) placement should be flexible enough that a child could be moved to a different setting if the situation warranted it. The main educational and service delivery options are : (a) The Regular Classroom, (b) The Special Class, (c) The Special Day School, (d) Home-bound Instruction, and (e) Hospitals and Residential Institutions. During the past two decades, especially the 1970s, a movement has grown to provide services to the mentally retarded in their home communities. Living arrangements such as "Group Homes", "Supervised Apartment Living Units", "Foster Family Homes" located in the local community are preferable to large residential institutions. It is best to regard retarded people as "developing individuals" who are capable of growth and development that can lead to favourable changes in their behaviour.

#### 4.2 Provision for the EMR

The standards aimed at and the methods employed should be functionally oriented. All the School activities should serve practical and realistic aims for this type of child. The main aims in the education of EMR are to promote three A's of personal Adequacy, Social Adequacy and Occupational Adequacy. Personal Adequacy

means more than just the ability to take care of ones ordinary everyday needs. Social adequacy means helping the child to behave and conduct himself generally in ways that make him acceptable to his fellowmen both in work and in leisure activities. Occupational Adequacy is essentially practical. We have to impart those skills which will enable him to secure employment and become either wholly/partially economically independent. Of equal importance is the promotion of attitudes and behaviour in the work situation which make him acceptable both to his employer and his fellow-workers. In the context of occupational competence, the tool subjects of reading, writing and counting should be emphasised. It is a pre-requisite that before teaching the three R's, the retarded needs coaching and training in the learning of language. The teacher in the School should focus on language training as a priority item when she deals with the mentally retarded. The conversations and instructions to the child should be in simple worded sentences. The teacher should allot a few hours entirely for this exercise. Emphasis should be on enough language background to understand what is going on around the child, rather than on correcting the grammatical errors. Corrections should be confined to only gross errors. Since the imagination of mentally retarded cannot be stretched too far, story reading and story telling should be extremely simple with plentiful use of pictures to sustain his interest. Greater the mentally retarded child's command over language, greater the chances of his becoming socially integrated.

Very beautifully illustrated colour picture books could serve as useful medium in teaching of language and speech to the beginner and it helps to bridge the gap between learning to talk and learning to read. One could help the retarded to learn to read by using printed cards-some cards bearing in bold clear letters the names of familiar persons, familiar objects, action words, etc. The books used for reading exercises should be very

carefully chosen suiting the level of comprehension and interest of the child. A mentally retarded child who has learnt reading upto a primary level needs a great deal of patience in doing practice, greater supplementary teaching and reteaching what had already been taught and learned. Use of picture colouring, matching words and pictures, drawing, picture finding and story making would all be very effective techniques to adopt in teaching the mentally retarded. Any mentally retarded with a capacity for learning to read should be helped to develop it to the fullest extent, so that his social integration and later vocational training could be facilitated.

While learning to read may be relatively simpler because of the involvement of rote learning, learning to write would be rather a far more difficult task to accomplish. No serious attempts should be made to teach writing to the child until the muscles involved are sufficiently developed to perform with reasonable ease and comfort. As in reading, considerable repetition, practice and re-writing are essential before the mentally retarded child could learn to write to a certain extent.

The ultimate purpose then of the education which has been outlined for the EMR is to help the child in a positive realistic way to take his place in the community as a wage earner and a citizen.

#### 4.3 Provision for the TMR

The TMR children will always require some form of protected environment, either under guardianship in their own homes or under care in an institution or sheltered workshop. This does not mean that they are incapable of deriving benefit from education. No child should be thought of as ineducable. Our aim should be to make them as self-sufficient, socially adjusted and economically useful as their limited resources will allow. With these broad objectives in mind the curriculum would tend to cover the following main areas.

- a) Self care (eating, dressing, washing, toilet, etc.)
- b) Social Training (group activities as in games, story-telling, simple dramatic work, good manners, aesthetic experience, moral training etc.)
- c) Sensory Training (making full use of their senses, increasing awareness of themselves and the world they live in).
- d) Language Development (Story-telling, simple dramatic work, discussions, picture books, outings, etc.)
- e) Craft Work ( weaving, canning, basketry, rug-making, light assembly work, knitting etc.)
- f) Academic Skills (Knowledge of simple everyday words, simple calculations in money, etc.)
- g) Music (helps to release energy).

Thus the educational programme for the TMR emphasises physical and social rather than intellectual skills. Self-sufficiency and independence are stressed so that the burden which they impose on their parents and the community is minimized, while they themselves enjoy as full a life as is possible for them.

#### 4.4 Role of Parents as Teachers

In India the retarded child as far as possible is to be looked after by the family. The Western Countries had their experimentation with institutional care. Large institutions were built in and was considered that they are the ultimate answer for the care of mentally retarded. The adverse effect the institutional atmosphere had on the children was something far from

desirable. It had a dehumanizing effect on them and many inmates developed what is called the insitutional personality. As a result one came back to the concept of normalization and community care. Luckily in India we have not made such mistakes so far. The institutions that we have are the small day care insitutions where the individual goes during the day time and returns home to his family in the evening. This is fortunate because the handicapped individual is not subjected to the undesirable insitutional stresses as in the west. No institution can adequately replace a good home. It can only supplement it. It is better to keep a retarded child at home rather than place him in a boarding school. These children need individual attention which can not be provided by most of the insitutions on account of limited resources.

The family is a stable social institution in our country. The family bond is strong enough in India, the child should be absorbed in the family as far as practicable. In such an affectionate and secure atmosphere the mentally handicapped have lesser problems than they have in monotonous and mechanical institutional atmosphere. The concept of mother teacher needs to be given proper consideration. If the mother devotes time for the retarded child in a natural environment, all encouragements and material incentives should be provided to the family. The state may give some financial assistance to the family. Some weekly classes for the parents of the retarded may be organized in different localities which would enable them to be acquainted with the probable solution for various problems faced by them and they would also be able to interchange their ideas and views regarding the problems of their offspring with the fellow parents. The parents can also be assisted in home care by a number of specialized services such as visiting nurses, social workers and visiting house-keepers and by an opportunity for temporary short-term placement of the retarded child in an institution or summer camp in times of crises and increased family tension. Recent



experience clearly shows that the introduction of modern diagnostic, treatment and training facilities into the community reduces the need for long-range institutional placement, which in time will probably be limited to bed-ridden, profoundly retarded patients and those with severe emotional disturbances. Thus residential institutions may be provided for those whose environment is not a congenial one or whose condition is so profound that demands a lot of care which the family cannot afford. Proper legal provisions need to be made for the protection of the retarded against exploitation. Coordination of professionals concerned with the problem of the retarded may be effected in the form of meetings organized periodically at different locations. Need for public awareness about the problem of retardation and development of the correct attitude towards the retarded is another pre-requisite. The special care and training should be started at the early stages of child's life in the home. The parents in the home environment are the first and primary educators of the child. The early years in the life of a mentally retarded child are tremendously important for his physical, psychological, emotional, intellectual and social development. The early years are the opportune years to teach basic self-care skills such as eating, toiletting, cleanliness, bathing, dressing and grooming, playing with toys and friends, etc. If the child does not get a good start at home during the pre-school years, learning these skills becomes very difficult and slow in school. Great care should be taken to establish a daily routine by which the self-care activities become part and parcel of the child. Once he gets familiar with his routine, it will automatically follow what comes next. After the routine has been established there should not be frequent changes.

##### 5. CONCLUDING REMARKS

To sum up : The mentally retarded are capable of development and this capability can be more easily developed if they enter an educational programme very early in age. Hence with early diagnosis and proper stimulation, the mentally retarded can be helped to reach as near a normal development as possible. This improvement and progress are subject to the severity of mental retardation; milder the retardation, greater the possibility of the mentally retarded getting integrated with the normals. Mentally retarded need considerable systematic guidance and encouragement to imitate the behaviour of others and learn the various required patterns of interaction. Since they can get easily distracted, much tolerance, patience and flexibility on the part of the staff is called for. The mentally retarded need an intensive, repetitive and dedicated teaching with the help of adequate teaching materials. Hence smaller classes and more family based institutions are required wherein both dedicated trained teachers and cooperative parents could take up the task of education for the mentally retarded.

Thus educating the mentally retarded involves a great deal of effort on the part of the school, educators, public and the parents. The cost may be high but the end justifies the means. If we can help the mentally retarded child to achieve his fullest possible growth, then the cost is worthwhile.

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## INTEGRATED EDUCATION OF MENTAL RETARDATE S

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With the high magnitude of mentally handicapped population, limited number of special schools, shortage of trained manpower, financial constraints, lack of resources, etc. some alternative strategy for education of mental retardates needs to be developed.

The concept Integrated Education of Disabled (IED) is one such alternative which is going to be very helpful in serving a large number of such children all over the country. The Government of India initiated the scheme of IED in 1974 which was modified in 1981. Hundreded per cent financial support from central funds is available to all the States and Union Territories implementing this scheme. The IED scheme is in operation in many States and Union Territories. Most of the States/UTs implementing the scheme are still at the experimental stage.

The programme is gaining momentum in pursuance of the National Policy of Education (NPE) 1986 which envisages education of disabled children in common schools as far as possible. The programme has assumed further significance due to the Nation's commitment to expedite universalization of primary education (UPE) in the seventh five-year plan. The Ministry of Human Resources Development (MHRD), in consultation with the National Council of Educational Research and Training (NCERT), has now revised this IED scheme. Some of the salient features of the revised scheme are :

- a) The scope of the scheme has been widened to cover children with mild mental handicap.
- b) Though one implementing agency is the State, the scheme envisages involvement of voluntary agencies in its implementation.

- c) It stresses appointment of qualified special teachers as resource teachers. Specific proformas for application of grant and monitoring of information have been provided.
- d) To ensure continuity of the scheme and reduce delay in the availability of funds, the funding procedures have been modified.

The stage of implementation has been upper primary or secondary in most of the States/UTs. Pre-primary education is almost missing. Close interaction among disabled and normal children in impressionable years promotes understanding and appreciation of the assets and limitations of each other. Pre-school education is the first stepping stone in the life of every child, normal or mentally retarded. The integration should start from the family, through immediate community and school, to the world of work.

The concept integrated education is an off-shoot directly emerging from the principle of normalization. Historically, facilities for mentally retarded were always considered separately from the regular school patterns. However, the recent trend seems to be in the opposite direction. While discussing the background, concept, characteristics, and issues relating to mental retardation with particular reference to mild mental retardation (50-70 points), Panda and Goel (1987) examined the conceptual basis and constraints of mainstreaming in relation to feasibility with supporting empirical research evidences. They further examined the inter-relationships between policy, education, development and research in the context of NPE-PA, 1986 and suggested a comprehensive coverage for policy formulation at the national level for the mentally retarded.

All types of provisions for services to the handicapped have passed through certain stages of development. Karl Grunewald (1980) has identified such stages of which the first one is the diagnostic stage where diagnoses are made and plans are formulated to meet particular

needs. The second stage is that of specialisation where particular needs are met by special institutions. The third one is the stage of differentiation in which it is realized that a particular service cannot be standardized for all recipients. The relevant factors in this respect could be different age groups, degree of retardation and the like. The final stage is a composite one characterized first by decentralization of services, then provision for integration of services to the retarded with those similar services available to the non-handicapped in the community.

Special education is an enriched form of general education aimed at enhancing the lives of disabled persons. Thus special education bears testimony to the concept of equality of educational opportunity. In view of this ideology, the principle of normalization was evolved in Scandinavia. Nirje, Wolfens Berger and Bank-Mikkelsen are the main pioneers of this principle which states : "Making available to all mentally retarded people, patterns of life and conditions of everyday living which are as close as possible to the normal circumstances and ways of life in society". Consequently, "Integration" and "Mainstreaming" became catch words in the Special Education Vocabulary. Normalization, Integration or Mainstreaming refer to the process of interaction of handicapped and normal children in educational settings."

Normalization implies the utilization of services and facilities made available to all persons, normal or otherwise, but which are culturally appropriate. It does not mean "to make normal".

Mainstreaming refers to the philosophy of educational integration, i.e. retaining mentally retarded children in the regular classroom with supplementary assistance by specially trained persons.

Integration is an outcome of de-institutionalization. Integration is always considered as social integration, ~~academic integration~~ or both. The strategy of integration is usually thought of as educational programming in which handicapped

children attend classes with normal children on their full-time or part-time basis.

From the parents' point of view, integrated schooling appears to be less stigmatising. This will also extend an opportunity for the normal children to have some interaction with the handicapped children. Ordinarily prejudices, less compromising attitude, bias and ignorance prevail in most situations discouraging any close relationship between the two. However, under the IED scheme, children as well as teachers would become exposed to the retarded which would help them to develop an understanding and tolerance for them.

#### Patterns of Integration

There are four patterns of integration of mentally retarded children.

##### Full or Complete Integration

The mentally retarded children are enrolled in a regular class throughout the day and they receive support from the special teacher at some time during the week. Hence, the retarded children receive all the same services which are available to all the children in the classroom.

##### Partial Integration

Mentally retarded children are enrolled in a regular class but they avail the services of resource room and the resource teacher everyday in the school premises. The amount of time spent in the resource room varies but they generally spend a part of the day in the resource room. Partial integration may include academic and non-academic subjects.

##### Special Class in Regular School

In this system mentally retarded children are enrolled in a special class but they are integrated into a regular class for one or more subjects daily.

### Reverse Integration

Normal children are enrolled in a special class so that they participate in academic and non-academic activities. This is often done on a short-term or temporary basis.

The principle in adopting a particular pattern of education should be that it is matched with the capabilities of the child. The mentally retarded children are assessed to identify those who need special education programmes and to determine where instruction should be begun. It is best to place the child in the least restrictive educational environment that meets the child's needs. There is a trend to develop and offer infant intervention projects for very young children to reduce the effects of disabling conditions on later development. The pre-school handicapped child has the same needs, wants and problems as all other children, but he also has additional difficulties to overcome. The areas of development of most importance in young retarded children are gross-motor, fine-motor, perception, conceptual, social-emotional, communication and self-help. It is utmost essential to include parents in the education programmes for their young handicapped children (Goel, 1987a).

### Education for All Handicapped Children Act

One of the major objectives of providing an integrated setting for mentally retarded is that they must be mainstreamed in the least restrictive environment. In the USA, the concept of integration has been embodied in federal legislation in 1975 which is implemented by "Education for All Handicapped Children Act" (PL94-142). It was regarded as the "Civil Rights Bill of Education". The major provisions of this act are :

- i) Free and appropriate public education for all handicapped children between 3-21 years of age.
- ii) Safeguards to protect the rights of handicapped children and their parents.
- iii) Educating handicapped children with non-handicapped children to the maximum possible extent in the least restrictive environment.

iv) Developing and implementation an IEP for each handicapped child.

v) Involvement of parents in the education of their handicapped-children.

The basic intention of this law is to prevent an individual from being stigmatised through classification and labelling. When PL94-142 was developed, both professionals and lay persons confronted various attitudes and there has been a mixed bag of reactions--some favourable and some unfavourable.

### Levels of Integration

Integration in the society to the fullest extent of the individual's capacity is part of the framework of the least restrictive environment. LRP (1977) gave six basic levels involved in the concept of integration.

### Physical Integration

Physical Integration means reduction of physical distance between mentally retarded and normal children. Physical integration has to do with the basic security needs which are drawn from physical setting--living in a ordinary house, attending classes in a regular school building, working in industrial or business area, and taking an active part in regular leisure-time environments.

### Functional Integration

Functional integration is using the necessary and ordinary segments of the environment such as playgrounds, schoolyards, restaurants and public transportation along with the rest of the children. That is, functional integration means reduction of physical distance between two groups by joint utilization of resources.

### Personal Integration

Personal integration pertains to meeting the retarded person's need to be loved through personal interaction with parents, brothers and sisters, friends and marriage partners.



### Social Integration

Social integration deals with the respect and esteem that the retarded person experiences in the community.

### Societal Integration

Societal integration provides opportunities for self-fulfilment, growth and achievement as a responsible and contributing citizen. Societal integration refers to adults and signifies that the mentally retarded have the same access to resources as others, the same opportunity to influence their own situation, have the same productive working role and form part of a social community with others.

### Organizational Integration

Organizational integration focuses on the proper balance between generic and specialized services.

### Implementation

To ensure the benefits of the IED programme, the administrator who is obviously the Principal of a school of normal children must be a qualified person and well versed with the problems of mentally retarded children. Also, the teachers must have knowledge about the assets and limitations of mentally retarded children. It is with this objective that Government of India is planning to start various training programmes in Special Education so as to enable the teachers to implement the IED programmes effectively. The Rehabilitation Council has already standardized more than one and half dozen training courses during the last one year for professionals dealing with disabled persons. The National Council of Educational Research and Training (NCERT) and the National Institute for Mentally Handicapped (NIMH) are developing curriculum, teaching materials and organizing training programmes for the untrained teachers from time to time. Special Education Cells have also been created in all the four Regional Colleges of Education under NCERT for organizing various training programmes

in the field of Special Education. The National Council of Educational Research and Training also prepared a draft syllabus for U.Ed. (Special Education). The following broad criteria may be adopted by the administrator to run an effective IED programme.

#### Admission of M.R. Children

Before admitting any handicapped child, the administrator must ensure that a particular handicapped child has only one nature of handicap and is not multiply handicapped. For instance, if the child is mentally retarded, he should not have any additional handicap like blindness, deafness, etc. Secondly, the administrator must ensure that the MA of the handicapped child is at par with his normal counterpart. Thus the retarded children will be chronologically much higher in age than the normal children in the class.

#### Availability of Instructional Material

The administrator and regular teachers must ensure that appropriate instructional material is provided for the educational needs of the mentally retarded children so that they may keep pace with the normal peers. Intensive efforts must be made to devise special teaching devices so that their learning ability can be improved. If the teacher is aware of the advantages of these devices, it may be beneficial to impart training to the retardates.

By instructing the retardate with material suited to his intellectual level, it is possible to improve his capacity to learn as well as apply the learning to varied situations (Goel and Sen, 1984, 1985). Instructional materials should contain a number of intrinsic elements in order to enhance their effectiveness in the class. The crucial factor lies in the teacher's responsibility to plan and develop and carry out consistent programmes that will fulfil the immediate or long-range goals of education for the retarded. For too long, teaching aids have been thought of as blocks, beads, clay, puzzles, hammers, scissors, etc. - the list is endless. When

designing the material, questions such as "Does it enhance the attention?", "Does it serve the purpose?", "How does it clarify or reinforce the teacher's verbal explanation?" must be considered. There is no doubt that concrete aids do help to make lessons more meaningful. They serve to attract and hold the pupils' attention. Concentration may be extended for longer periods than by purely verbal explanations. A well-designed teaching aid having more attention-getting quality arouses curiosity and interest in the subject. It certainly adds variety and broadens the learning scope. However, there is always the danger that pupils might pay more attention to the "aid" at the expense of seeing the significance of the subject to be learnt. The teacher must be alert to the moment when the aid becomes merely a "plaything". The balance between the "subject" and the "aid" is at times a fine hair-line.

The most recent innovation of teaching the children in classroom learning is through computers. Electronics is making revolutionary strides day to day and many sophisticated aids and equipments in the field of information and communication are being developed. The N.E.P.O.A (1986) has suggested the induction of technology in education and rehabilitation of the disabled children. Thus a project on the development of software for the education of the handicapped has been planned by the National Council of Educational Research and Training.

#### Effective Resource Room Programme

Before supplying the equipment and instructional material to the handicapped child, a Resource Room teacher must be made available to teach the handicapped child to use these aids and equipments.

Apart from imparting educational instruction to the handicapped child, the resource teacher must be in constant touch with his parents for periodic guidance and counselling. The Resource Room will have essential equipment, learning aids and material. Some core facilities can be provided in each of the institutions individually (i.e. in the Resource Room) and some on shared basis (i.e. in the Resource Centre). Goel (1988)

has discussed various Guides/Catalogues/Technical Aids Information Systems/Databases which have been developed for the disabled in India and abroad.

#### Coordination between Regular Teacher and Resource Teacher

The regular teacher and the resource teacher share responsibility jointly. The resource teacher not only helps these children to learn special skills but also helps regular teachers, administrators and parents in understanding the abilities and disabilities of these children.

#### Teaching and Learning

Learning is greatly influenced by organismic, task, method and environmental variables. Readiness for learning, motivation to learn, reinforcement, exercise, distributed practice, active participation, and over-learning are some of the important methodological guidelines of learning process. Since the retarded children often have difficulty with attention, short-term memory and association, there is need for overlearning to be an integral part of the educational programme. To control the chance of errors, accuracy instead of speed should be stressed. This is especially necessary in the early stages of learning when new and basic concepts are formulated, which will later form the basis for subsequent learning. Successful teaching requires : (a) careful grading of work, (b) more practice and repetition of main skills and facts with suitable variations and manipulation of the material, (c) visual activities through the use of pictures and concrete examples, (d) high motivation, (e) development of habits of attending, (f) some standard routines so that pupils know what to expect and experience a feeling of orderliness, (g) the teacher should speak slowly, use simple words, short sentences and time for words to "sink in", as too many words at a time tend to confuse the children, (h) break each task into the simplest components, define each step clearly, reward each step at once and not when the task is completed. The teacher can develop a method of prescriptive

programming a battery of skills through task analysis--both academic and social, as well as pre-vocational and vocational--throughout the student's school day. The systematic use of task analysis for programming school activities ensures the student's active involvement in as many activities as he or she is capable of responding to in an appropriate manner. Task analysis thus includes many of the features of a good clinical/prescriptive approach. It requires individual evaluation and diagnostic decision-making, it specifies an instructional sequence, it suggests teaching strategies; and it provides a system for recording data (Goel, 1987b).

Even though the mentally retarded appear to have slower learning and poorer short-term retention than normals, it is important to point out that the mentally retarded can learn a variety of responses sometimes almost as well as the normals. There is little available evidence of an appreciable deficit in long-term retention when the mentally retarded are compared with the normals, provided the two are compared on original learning (Grony, 1984). The relative inability of the retarded to inhibit responses may account for short attention spans. The deficits in duration of attention, symbolic behavior, inhibition, and delayed response.

It has been seen that the basis of good memory is good learning. Therefore, the problem is to see how the learning process of the mental retardates can be made more efficient. The reasons for the learning deficit do not seem to be in the area of instrumental learning but rather in that of attention (House and Zeaman, 1958). If the item can be made more attention-catching, it will reach the retrieval phase earlier than other items. Novelty increases initial attention because learners are attracted to novel stimulus (Goel, 1982, 86).

These ideas about enhancing attention of retarded children by making instructional materials more informative and meaningful are effective only to the extent that they are fully understood. The teacher is the key

person in this process. Without the teacher's skill even the most sophisticated curriculum will be limping and boring.

### Development and Programme Support

The purpose of the IED scheme must be explained to regular teachers, counsellors, social workers, normal students, local and district level supervisors and administrative personnel. The job of each person must be clearly understood. Successful integration can only develop when each person works in partnership.

### IED Programmes in Rural Areas

About 80 per cent of mentally retarded children are living in rural areas. It is disheartening that all the IED programmes are available in urban areas. The handicapped have to leave their families and come to urban areas. It is also disheartening that our trained personnel are not ready to serve in rural areas. Some package of incentives may encourage the resource teacher to make the IED programme a great success. The basic purpose of the IED scheme is defeated if the handicapped have to leave their families and shift to urban areas for receiving educational facilities. The IRDP and ICDS can play a vital role in this direction.

### An Overview

Each person is unique and therefore individual differences are universal. This tenet is the basis for negating all efforts that keep retarded persons out of the mainstream of society. The principle of normalization affirms the humanness of all retarded individuals, whatever their degree of disability, and assures them of the right to life, liberty and the pursuit of an existence as close to normal as possible within the least restrictive environment. The burden does not fall on the retarded person alone. The community and the retarded person must harmonize their expectations.

The mentally retarded are capable of development and this capability can be more easily developed if they enter an educational programme very early in age. Hence

with early diagnosis and proper stimulation, mentally retarded can be helped to reach as near a normal development as possible. This improvement is subject to the severity of mental retardation, the milder retardation, the greater the possibility of the mentally retarded getting integrated with the normals. When considering educational options for the retarded, it is important to keep in mind that (a) educational placement is based on the child's needs; (b) the child is placed in the most facilitative (or least restrictive) environment; and (c) placement is flexible enough that a child could be moved to a different setting if the situation warranted it. Considerable interest has been shown in the recent years on the need to equalize educational opportunity among special groups of children. To provide equal educational opportunity to this group of children, specific strategies need to be evolved. Integrated Education for Disabled Children (IEDC) has been considered to be a viable approach for achieving this objective. The Project Integrated Education for the Disabled (PIED) based on this approach was included in the GOI-UNICEF Plan of Operation for 1985-1989. The Programme of Action (POA) for the implementation of the NPE-1986 has stressed the need to strengthen the IEDC scheme to realize the goal of the UPE for this group of children. The PIED has been formulated in collaboration with the UNICEF and is expected to achieve the following objectives :

- i) To increase enrolment of disabled children in general schools so that they can be educated with other children.
- ii) To improve retention of disabled children in general schools through improved educational facilities by way of curriculum adjustment and adaptation of instructional methods and materials to their needs.
- iii) To improve achievement of disabled children.
- iv) To develop context specific delivery modalities to achieve the above objectives.

The POA stressed that as education of the handicapped in special schools is very costly, "it will be ensured that only those children whose needs cannot be met in common schools are enrolled in special schools. Once they acquire communication skills and study skills, they will be integrated in common schools". The accomplishment of this task requires careful planning and efforts to mobilise resources within the education framework as well as support from health, welfare and labour sectors. Thus educating the mentally retarded involves a great deal of effort on the part of the school, educators, public, and parents. The cost may be high but the end justifies the means. If we can help the mentally retarded child to achieve his fullest possible growth, then the cost is worthwhile.

In a highly competitive world where success is judged by achievement, it is but natural that handicapped persons would lag behind their non-handicapped peers as they are disadvantaged in several ways-academically, physically, vocationally, and socially. The principle of normalization, though evolved in Scandinavia, is universal in appeal and bears testimony to the ideology of "equality of opportunity for all". It is true that many practical difficulties and drawbacks do exist, both in developing and developed countries, but they can be overcome through community support, financial support, manpower development, orientation and training programmes, political will and gaining knowledge in understanding the assets and limitations of mentally retarded. The NPE will lay special emphasis on the removal of disparities and to equalise educational opportunity by attending to the specific needs of those who have been denied equality so far. The objective should be to integrate the physically and mentally handicapped with the general community as equal partners, to prepare them for normal growth and to enable them to face life with courage and confidence (National Policy on Education, 1986, Pp 6-8).

Normalization determines the effectiveness of service systems as these relate to the individuals and individuation



regards the uniqueness of the human being. Some of the individual differences are obvious, such as certain physical disabilities, and others are concealed to a certain extent, such as IQ, learning potential, and social adaptation. Yet it is uniqueness that makes for the individual strengths and limitations that should be utilized in upgrading the knowledge and skills of the retarded person. The path towards self-acceptance is particularly rocky for the retarded persons. They experience dissatisfactions in both interpersonal and intrapersonal responses. Thus the retarded individuals are constrained from moving from dependence to independence. Risks, rights and responsibilities are interwoven with acceptance. Opportunities for taking risks are the bases for obtaining and using right and for assuming the responsibilities associated with these rights. What every retarded person needs is the same as what every non-retarded person needs - self-fulfilment, self-dependence and self-esteem.

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## INTEGRATED EDUCATION OF THE VISUALLY HANDICAPPED

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### 1. IED Programme

We do not have accurate data of blind and visually impaired persons in our country but on the basis of several community surveys there are about 9 million blind and 45 million visually impaired persons in India. Besides, about one million cases are added every year.

With this - high magnitude of visually handicapped population, lack of resources,  
- limited number of special schools,  
- financial constraints,  
- shortage of trained manpower, etc., some alternative strategy for education of VI children needs to be developed.

IED is one such alternative which is going to be very helpful in serving a large number of such children all over the country.

The Government of India initiated the scheme of IED in 1974 which was modified in 1981.

Hundred percent financial support from Central funds is available to all the States and Union Territories implementing this scheme.

The IED scheme is in operation in 14 States, including the Union Territory of Delhi. Most of the States/UTs implementing the scheme are still at the experimental stage. The programme is gaining momentum in pursuance of NPE 1986 which envisages education of disabled children in common schools as far as possible. The programme has assumed further significance due to the Nation's commitment to expedite the realisation of elementary education in the seventh five year plan. The stage of implementation has been up to primary or secondary in most of the States/UTs. Pre-primary education is almost missing. Close interaction among the disabled and normal children in pre-school years promote understanding

and appreciation of the assets and limitations of each other. Pre-School Education is the first-stepping stone in the life of every child, sighted or blind. The NAB-Mata Lachmi Nursery is one institution which admits children between 2 to 5 and follows the normal montessori course. The integration should start from the family, through immediate community and School to the world of work.

To ensure the benefits of IED programme, the administrator, who is obviously the Principal of a School of normal children, must be a qualified person and well versed with the problems of visually handicapped children. Also the teachers must have knowledge about the assets and limitations of VH children. It is with this objective Government of India is planning to start B.Ed. (Special Education) so as to enable the teachers to implement IED programmes effectively.

The following broad criteria may be adopted by the administrator to run an effective IED programme.

## 2. ADMISSION OF VH CHILDREN

Before admitting any handicapped child, the administrator must ensure that the particular handicapped child has only one feature of handicap and is not multiply handicapped. For instance if the child is blind, he should not have any additional handicap like deafness, etc., Secondly, the administrator must ensure, that the IQ of the handicapped child is at par with his normal counterpart.

## 3. AVAILABILITY OF INSTRUCTIONAL MATERIAL

The administrator and regular teachers must ensure that all specialized instruments or gadgets will be provided for the educational needs of the VH child. For instance, availability of text books in the braille script, tapes & cassette recorder, raised maps and diagrams, special equipment for reading and writing, three-dimensional aids, etc., must be made available to the blind child so that he may keep pace with the normal peers.

#### 4. ROLE OF THE RESOURCE ROOM PROGRAMME

Before supplying the equipment and instructional material to the handicapped child, a Resource Room Teacher must be made available to teach the handicapped child to use these aids and equipments. Apart from imparting educational instruction to the handicapped child, the RT must be in constant touch with his parents for periodic guidance and counselling.

#### 5. Coordination between Regular Teachers and Resource Teacher.

The regular teacher and the resource teacher share responsibility jointly. The resource teacher not only helps these children to learn special skills but also helps regular teachers, administrators and parents in understanding the abilities and disabilities of these children.

#### 6. TEACHING AND LEARNING

The basic function of the eye is to collect visual information from the environment and transmit it to the brain. Sighted children receive about 85 to 90% information through their eyes. This input is denied to the blind. Blind children use other senses - primarily their ears and sense of touch. Thus through braille reading and writing, special auditory training, orientation and mobility training, they are able to receive education alongwith sighted children and thereby gain the same social attitudes, the same information and develop the same level of confidence.

##### A. Academic Standards

The teacher must maintain the same academic standards for all children. The same outcome can be expected. Occasionally, a lesson may be modified or substituted. With very young children, when text materials are highly or exclusively visual, a rare lesson may be omitted. However, these problems diminish as the child progresses through early standards.

### B. Knowledge of Braille

A regular teacher will not require to learn braille in order to effectively integrate a braille reader into his class. However, if he is interested in learning, the RT will be happy to share this skill with him informally or even formally.

### C. Carefulness about the usage of words

Does the regular teacher have to be careful about certain words he uses in the class? Absolutely not. He can say, "Look at this", "Do you see what I mean" "Can't you see the meaning of that expression in the text? etc. Be perfectly natural. A blind child is not a fragile thing, he must learn to interpret such expressions.

### D. Usage of Special Techniques.

Does a regular classroom teacher use any special techniques in his teaching? Probably not. One of the major responsibilities of the RT is to introduce complex concepts, unfamiliar page layouts, etc. in advance so that the blind child is prepared for regular teaching. RT will ensure that the blind child is comprehending fully. Some teachers place material on the blackboard without saying aloud simultaneously what they are writing, they find that blind child misses that information completely. A good teacher knows that a multisensory approach i.e. both writing on the board and saying what one is writing - is best to teach in integrated setting.

## 7. INTEGRATION AT THE SECONDARY LEVEL

Only academically bright students should be given the opportunity of integration at the secondary level.

Those students who have shown better skill in some trades other than academics, they should be given adequate opportunity to excel in their respective trade.

Unfortunately this is not being followed in our country. VII children with a mediocre academic performance are encouraged to go in for higher studies simply because scholarship to physically handicapped is available at a mere aggregate of 40% marks. As a result, such mediocre students get highly frustrated when they are unable to get gainful employment in the competitive world.

#### 8. DEVELOPMENT OF PROGRAMME SUPPORT

The purpose of IED scheme must be explained to regular teachers, counsellors, social works, normal students, local and district supervisors and administrative personnel. The job of each person must be clearly understood. Successful integration can only develop when each person works in partnership.

#### 9. IED PROGRAMMES IN THE RURAL AREAS

About 80% of blind children are living in rural areas. It is disheartening that all the IED programmes are available in urban areas. The handicapped have to leave their families and come to urban area. It is also disheartening that our trained personnel are not ready to serve in rural areas. Some package of incentives may encourage the RT to make IED programme a great success. The basic purpose of IED scheme is defeated if the handicapped have to leave their families and shift to urban areas for receiving educational facilities.





## ASSIGNMENTS

SE 1. What is the definition of special education ?

SE 2. Why are incidence figures higher than prevalence figures ?

SE 3. List four concepts developed by early contributors to special education that are relevant today.

a)

b)

c)

d)

SE 4. Give four reasons why labels should be deemphasized.

a)

b)

c)

d)

SE 5. Name the items included in an IEF.

a)

b)

c)

d)

e)

f)

g)

SE 6. Describe the instructional setting alternatives of the continuum of services model.

Setting 1.

Setting 2.

Setting 3.

Setting 4.

Setting 5.

Setting 6.

Setting 7.

Contd...3/-

Setting 8.

Setting 9.

Setting 10.

SE 7. Write True or False.

- a) The term "exceptional children" refers Primarily to the gifted and talented \_\_\_\_\_
- b) There has been a steady, even growth in special education services since the early 1900s \_\_\_\_\_
- c) Institutions were originally set up for custodial purposes. \_\_\_\_\_
- d) Mildly handicapped children should always be educated in regular classes. \_\_\_\_\_
- e) There are relatively more handicapped children in minority cultures than there are in the general population. \_\_\_\_\_
- f) In most states teachers have a legal responsibility to report suspected cases of child abuse and neglect. \_\_\_\_\_
- g) Although there may be architectural barriers in a given School, all programmes must be accessible to the handicapped. \_\_\_\_\_
- h) A person may be handicapped in one situation and not in another. \_\_\_\_\_
- i) Today the trend is to reduce diagnostic labeling, particularly of children with mild disabilities. \_\_\_\_\_

j) Labels should be used only when necessary because they may have adverse effects if used incorrectly.

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k) Mainstreaming does not mean always placing exceptional children in regular classes.

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l) Mainstreaming is the educational placement of the child in the least restrictive environment.

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m) The move to small group homes from large residential facilities (known as de-institutionalization) is not necessary.

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M.R.8. Write True or False:

a) A diagnosis of mental retardation should never be made solely on the basis of an intelligence test.

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b) A special education teacher could not teach if he did not have the IQ scores of the mentally retarded children in the class.

---

c) Adaptive behaviour measurement is more subjective than measurement of intelligence.

---

d) Doll's major contribution to a definition of mental retardation is related to the area of social competence.

---

e) Retarded children should be classified only when classification leads to the development of an appropriate educational programme.

---

- f) One can place great faith in the use of influence figures for planning services for the mentally retarded for any given community. \_\_\_\_\_
- g) A knowledge of the causes of retardation can be very helpful to a teacher in the actual instruction of retarded children. \_\_\_\_\_
- h) The causes of most cases of mental retardation cannot be clearly identified. \_\_\_\_\_
- i) Most TMR children will be educated in self-contained special classes. \_\_\_\_\_
- j) Special day schools for the retarded continue to be a popular educational option. \_\_\_\_\_
- k) Mental retardation is not primarily a medical problem. \_\_\_\_\_
- l) The education of mentally retarded should not have overtones of vocational training with ultimate rehabilitation as its goal. \_\_\_\_\_
- m) In India, concentration must be in rural areas and community based services on a large scale are very much required. \_\_\_\_\_
- n) The presence of CNS pathology is the rule rather than the exception with TMR group. \_\_\_\_\_

Contd...6/-

MR 9. Fill in the blanks.

- a) The popularly used tests of intelligence generally report a summary of performance in the form of an \_\_\_\_\_ score.
- b) The AAMD requires that a child's \_\_\_\_\_ and \_\_\_\_\_  
\_\_\_\_\_ be considered in diagnosing mental retardation.
- c) The components of adaptive behaviour are \_\_\_\_\_
- d) A significantly subaverage score is one that is \_\_\_\_\_ standard deviations below the mean on a standardized test of intelligence.
- e) The developmental period is the period between the child's \_\_\_\_\_ and \_\_\_\_\_
- f) The three categories in the classification system which are most useful for special education programming are \_\_\_\_\_
- g) The major criticism of foster family care for the retarded is \_\_\_\_\_
- h) The mentally retarded child has special problems with letters which have \_\_\_\_\_ and \_\_\_\_\_
- i) The look-say method is a disaster for mentally retarded child. He needs phonics and tactile perception through \_\_\_\_\_

- j) The \_\_\_\_\_ between professional people is a big deterrant to develop meaningful programmes for the retarded.
- k) It is necessary to \_\_\_\_\_ the programme if it has not done any good to the child.
- l) Slow learners must be provided with relatively \_\_\_\_\_ of work of a simple type.
- m) The slow learners form a \_\_\_\_\_ of the school population.
- n) The group between one and two standard deviation below the mean is described as having \_\_\_\_\_.

MR 10. Complete the following sentences with one of the options provided.

- a) The focus of mainstreaming is to help \_\_\_\_\_ the life of the retarded child (Protect/Normalize/organise).
- b) Most professionals believe that \_\_\_\_\_ programmes provide the mentally retarded and handicapped with the best educational opportunities. (Special Education/Mainstreaming/Segregated).
- c) \_\_\_\_\_ is one alternative which is going to be very helpful in serving a large number of mentally retarded in India (IED/Special School/Residential schools/Sheltered Homes).
- d) National Policy of Education-1986 (MHRD, Govt. of India) envisages education of handicapped children in \_\_\_\_\_ as far as possible. (Common Schools/Special Schools).

Contd...8/-

- e) \_\_\_\_\_ are the first and Primary Educators of the mentally retarded child. (Social workers/Parents/Teachers/Community Health workers/Doctors).
- f) To be classified as mentally retarded, a person's IQ, as measured by a standardized intelligence test, must be lower than \_\_\_\_\_ (55/70/100).
- g) Organic causes of mental retardation generally lead to \_\_\_\_\_ retardation. (mild or moderate/severe or profound).
- h) Mental retardation that occurs because of a lack of Oxygen in the bloodstream is caused by \_\_\_\_\_ (Systemic disease/infections disease/Physical agents).
- i) Special education programmes have been challenged on the basis of depriving children of \_\_\_\_\_ (personalized attention/Proper diagnosis/ their constitutional rights).
- j) Davison and Neale have suggested that \_\_\_\_\_ of retarded children would probably achieve higher levels of intellectual and social functioning if they were provided with appropriate training at home (20%/40%/a majority).

MR 11. Which of the following is not used to classify an individual as mentally retarded.

- a) An IQ score for below the mean.
- b) An inability to meet social demands.
- c) Problems that manifest themselves before the age of sixteen.
- d) At least one behaviour problem.



- MR 12. Which of the following best describes a case of mild retardation ? The person can
- a) achieve an intellectual level comparable to a 16-year-old.
  - b) Work in skill areas with some supervision.
  - c) Care for himself in basic hygiene areas but cannot do much more on his own.
  - d) None of the above.
- MR 13. There are more mentally retarded people in the lower socio-economic classes because.
- a) Children of these classes are mentally not reinforced for intellectual abilities.
  - b) Retardation is detected and reported by welfare and poverty programmes.
  - c) Lower class people have inferior genes
  - d) None of the above.
- MR 14. Which of the following is a false statement ?  
In the next decade we can expect
- a) more specific labels for the mentally retarded
  - b) more support from the legal system for the retarded.
  - c) less segregation of retarded and average children in the classroom.
  - d) educators to develop more positive and productive programmes for the retarded.
- MR 15. The idea of providing extra help and specially trained educators to assist retarded children in making significant gains

- a) is mandated by the Education for all Handcapped Children's Act.
- b) is referred to as special education
- c) has received a considerable amount of criticism
- d) all of the above.

MR 16. Fill in the blanks

- a) The components of AAMD. Definition of mental retardation are
  - i) \_\_\_\_\_
  - ii) \_\_\_\_\_
  - iii) \_\_\_\_\_
- b) Approximately \_\_\_\_\_ % of population in India is mentally retarded.
- c) There are variations in the prevalence of mental retardation in India. The reasons for them could be lack of uniformity in
  - i) \_\_\_\_\_
  - ii) \_\_\_\_\_
  - iii) \_\_\_\_\_

MR 17. Match the following

- |                         |                    |
|-------------------------|--------------------|
| 1. IQ level             | medical            |
| 2. Level of functioning | psychological      |
| 3. Cause of MR          | adaptive behaviour |
| 4. Deficient in MR      | educational        |
| 5. Severe               | 50-70              |
| 6. Mild                 | 35-49              |
| 7. Moderate             | below 20           |
| 8. Profound             | 20-34              |

MR 18. Study the following statements and write True or False.

- a) A five year old child with mild mental retardation cannot be distinguished from a normal child of five years in many areas of development.
- b) A 16 year old person with moderate mental retardation can go beyond 5th grade level in academic subjects.

- c) A 22 year old person with severe mental retardation can be trained in all the vocational skills and can support himself and his family.
- d) A 13 year old child with profound mental retardation will respond for training in self help skills.
- e) A 27 year old person with mild mental retardation can pass pre-university examination.

MR 19. Which one of the following is not a prenatal cause of mental retardation.

- a) Exposure to X-ray
- b) Birth anoxia
- c) Rubella
- d) Chromosomal abnormality

MR 20. Which one of the following is the most common cause of mental retardation in India ?

- a) Diabetes in the mother
- b) Difficulties during delivery of the child
- c) Jaundice in the mother
- d) German measles in the mother

MR 21. Mental retardation can be caused by

- a) Ill treatment of mother during pregnancy.
- b) Interacting with mentally retarded persons.
- c) Pregnancy after 35 years.
- d) Black magic.

MR 22. List four preventive measures against mental retardation during the post natal period.

- a) \_\_\_\_\_
- b) \_\_\_\_\_
- c) \_\_\_\_\_
- d) \_\_\_\_\_

MR 23. In a mentally retarded person with fits

- a) Fits cannot be controlled
- b) Behaviour problems are always present
- c) Frequent fits impair learning process
- d) None of the above.

MR 24. Hyperkinesis includes all of the following except

- a) Excessively active
- b) Distractibility and short attention span.
- c) Vacant stare
- d) Lack of inhibition and poorly coordinated activity.

MR 25. List four conditions which can be mistaken for mental retardation.

- a) \_\_\_\_\_
- b) \_\_\_\_\_
- c) \_\_\_\_\_
- d) \_\_\_\_\_

MR 26. One of the commonest forms of multiple handicap is

- a) Down's Syndrome
- b) Cerebral Palsy with mental retardation
- c) Learning disabilities
- d) Mental retardation with microcephaly

MR 27. Match the following:

- |                             |              |
|-----------------------------|--------------|
| 1) Neck control             | a) 8 months  |
| 2) Sitting without support  | b) 24 months |
| 3) Standing without support | c) 4 months  |
| 4) Indicates toilet needs.  | d) 10 months |

MR 28. Give any three indicators of mental retardation

- a) \_\_\_\_\_
- b) \_\_\_\_\_
- c) \_\_\_\_\_

MR 29. Match the following:

- |                                   |              |
|-----------------------------------|--------------|
| 1) Social smile                   | a) 6 months  |
| 2) Drinking from a glass by self. | b) 4 months  |
| 3) Rolling Over                   | c) 15 months |
| 4) Walking without support.       | d) 21 months |

MR 30. Arrange the following steps in sequence.

- 1) Intervention
- 2) Diagnosis
- 3) Screening for mental retardation
- 4) Assessing current level of functioning
- 5) Psychological testing

MR 31. A male child aged 9 months is brought to you with the complaints of inability to hold the head, not able to roll about and not able to fix the eyes on parents. The child cries when hungry. The mother feeds the child periodically. On examination the child is found to be in lying position, not responding to any stimuli. The doctor after examining reported that clinically all the systems are normal.

MR 32. A ten year old boy is brought to you with the complaints of poor scholastic performance and adamant behaviour. He is studying in 5th standard. The parents report that the boy scores poor marks in class examinations since one year. He picks up quarrels with other children in the school. He shows interest in games and is found to be playing all the time. According to doctor's report the boy is normal physically. How will you proceed further in this case ?

MR 33. A seven year old girl is brought to you with the complaints of inability to talk properly, difficulty in walking, fits once a month and inability to brush teeth, bathe and dress properly. On a detailed enquiry it is found that the child was born after a prolonged labour and all the milestones of development of the girl were delayed. The doctor has prescribed medicines for fits and the physiotherapist is giving passive stretching exercises for the limbs as the limbs were found to be stiff. How will you proceed further in this case ?

MR 34. What are the three types of tests used for assessing general intelligence ?

- a) \_\_\_\_\_
- b) \_\_\_\_\_
- c) \_\_\_\_\_

MR 35. Developmental schedules are most useful for the age group:-

- a) 3-22 years
- b) 5-15 years
- c) 0-03 years
- d) all of the above.

MR 36. The most commonly used test for assessing adaptive behaviour in mentally retarded persons is

\_\_\_\_\_.

MR 37. A gross assessment of the \_\_\_\_\_ and \_\_\_\_\_ deficits are necessary before assessment as they affect the psychological test performance.

MR 38. Write true or false.

- a) The intellectual functions and adaptive behaviour of a mentally retarded person can be assessed by using a single test.

True/False

- b) Presence of sensory and motor impairments, language delay and behaviour problems pose difficulty in the psychological assessment of mentally retarded persons.

True/False

- c) While testing a mentally retarded person, one should choose a complex test first and then go for simpler tests.

True/False

- d) Keeping colourful toys, toffees and biscuits come in handy in establishing rapport with a mentally retarded child during a test situation. True/False
- e) Seguin form board test is a verbal test. True/False
- f) Vineland Social Maturity Scale is the most commonly used Adaptive Behaviour Scale for mentally Retarded individuals in India. True/False
- g) Observations about family interaction patterns should not be included in a psychological report. True/False
- h) The IQ score is a gross estimate of the general intellectual functioning and it does not give a view of the abilities on individual test items. True/False
- MR 39. Breaking down the teaching steps into small, systematic ones is called \_\_\_\_\_.
- MR 40. Write True or False
- a) The activities/skills must be taught only once a day. True/False
- b) Training of the mentally retarded person must be carried out only at the DRC. True/False
- c) Child should be appreciated even if he attempts to do a particular task. True/False
- d) Assessment of mentally retarded persons should be done only once in 3 years. True/False
- e) Two or three skills or activities can be simultaneously taught to a mentally retarded child. True/False
- f) Children with profound mental retardation can be integrated in normal schools. True/False
- MR 41. The three aspects of the integrated education of the disabled are
- a) \_\_\_\_\_
- b) \_\_\_\_\_
- c) \_\_\_\_\_

MR 42. A male child aged 2 years needs training in sitting without support. He does not have any other handicap. What activities will you take up to train him ?

MR 43. A child of 4 years needs training in standing without support. He does not have any other handicap. What activities will you take up to train him ?

MR 44. A child of 10 years needs to be trained in indicating his toilet needs. How will you train him ?

MR 45. Behaviour modification may be used to

\_\_\_\_\_undersirable behaviours and \_\_\_\_\_adaptive behaviours.

MR 46. Behaviour modification may be used to \_\_\_\_\_undesirable behaviours and \_\_\_\_\_adaptive behaviours.

MR 47. The target behaviour should be defined in \_\_\_\_\_and \_\_\_\_\_terms.

MR 48. Name the five steps in implementing a behaviour modification programme.

- a) \_\_\_\_\_ (b) \_\_\_\_\_  
c) \_\_\_\_\_ (d) \_\_\_\_\_  
e) \_\_\_\_\_

MR 49. Write true or false.

- a) Antecedents are the events which occur immediately before the behaviour has occurred. True/False  
b) Differential Reinforcement should never be used with punishment procedures. True/False  
c) Extinction should be used when problem behaviours are self-injuries or harmful to others. True/False



d) Aversion is the last method to be used for decreasing undesirable behaviours. True/False

e) Intermittent reinforcement is generally used first when teaching a new skill. True/False

MR 50. Name any four techniques for decreasing undesirable behaviours.

a) \_\_\_\_\_ (c) \_\_\_\_\_  
b) \_\_\_\_\_ (d) \_\_\_\_\_

MR 51. The four principles of presenting reinforcement are:

a) \_\_\_\_\_ (c) \_\_\_\_\_  
b) \_\_\_\_\_ (d) \_\_\_\_\_

MR 52. Match the following:

- |                         |     |                                     |     |
|-------------------------|-----|-------------------------------------|-----|
| 1. Social reinforcer    | (a) | Pleasant event following behaviour. | ( ) |
| 2. Primary reinforcer   | (b) | Money                               | ( ) |
| 3. Secondary reinforcer | (c) | Praise                              | ( ) |
| 4. Positive reinforcer  | (d) | Chocolates                          | ( ) |

MR 53. The two types of chaining procedures are

\_\_\_\_\_ chaining and  
\_\_\_\_\_ chaining.

MR 54. What are the four schedules of intermittent reinforcement ?

a) \_\_\_\_\_ (c) \_\_\_\_\_  
b) \_\_\_\_\_ (d) \_\_\_\_\_

MR 55. Name four commonly used procedures for increasing adaptive behaviours.

a) \_\_\_\_\_ (c) \_\_\_\_\_  
b) \_\_\_\_\_ (d) \_\_\_\_\_

MR 56. The characteristics of a good counsellor are

- a) \_\_\_\_\_ (c) \_\_\_\_\_  
b) \_\_\_\_\_ (d) \_\_\_\_\_

MR 57. List four important messages which you would give to the parents of a mentally retarded child in a rural area.

- a) \_\_\_\_\_  
b) \_\_\_\_\_  
c) \_\_\_\_\_  
d) \_\_\_\_\_

MR 58. Write True or False

- a) Parents should be given high hopes that the mentally retarded child will show dramatic results. True/False  
b) Lot of time must be spent in understanding the problems of the parents. True/False  
c) The goal of counselling is to protect the mentally retarded child from being illtreated. True/False  
d) Forming parent associations in the village will help the parents to understand the problem better. True/False

VH.59 Fill in the blanks.

- a) The two parts of the visual system are the \_\_\_\_\_ and the \_\_\_\_\_.  
b) Nearsightedness is to \_\_\_\_\_ as farsightedness is to hyperopia.

- c) Two diseases that resulted in large numbers of multihandicapped blind children are \_\_\_\_\_.
- d) \_\_\_\_\_ is the eye disorder caused by excessive Oxygen in incubators of premature babies.
- e) Visually impaired children are classified as either \_\_\_\_\_ or \_\_\_\_\_.
- f) With correction, a legally blind child has visual acuity of 20/200. A partially seeing child has visual acuity between \_\_\_\_\_ and \_\_\_\_\_.
- g) Field of vision is measured in terms of \_\_\_\_\_.
- h) The name of the most common instrument for screening visual impairments in children is the \_\_\_\_\_.
- i) The most widely accepted reason for social - emotional adjustment problems in blind children is \_\_\_\_\_.  
This can be overcome by \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.
- j) The most important areas included in the curriculum of the visually impaired but not in the curriculum of those with normal vision are \_\_\_\_\_ and \_\_\_\_\_.
- k) The media through which visually impaired children obtain information are \_\_\_\_\_,  
\_\_\_\_\_ and \_\_\_\_\_.
- l) The first Schools established for the visually impaired in Europe and the United States were \_\_\_\_\_ Schools.

- m) Persons involved in assessing visually impaired children should pay particular attention to the effects of the loss of vision on \_\_\_\_\_ development.
- n) Visual acuity is the ability to clearly distinguish \_\_\_\_\_ or \_\_\_\_\_ details at a specified distance.
- o) Visual acuity is measured by having children read letters, numbers or other symbols from a snellen chart \_\_\_\_\_.
- p) The basic function of the eye is to collect \_\_\_\_\_ from the environment and transmit it to the \_\_\_\_\_.
- q) A person with normal eye sight is said to have \_\_\_\_\_.
- r) If a person's field of vision is \_\_\_\_\_ degrees or less, then he/she is considered \_\_\_\_\_.
- s) The prolonged sensory deprivation is likely to influence \_\_\_\_\_ and \_\_\_\_\_ of the blind.
- t) A person who has received the best optical correction and can see at \_\_\_\_\_ in the best eye what a person with normal vision can see at \_\_\_\_\_ is considered legally blind.

VH 60. Write true or false.

- a) Cataracts are growths on the eye \_\_\_\_\_
- b) Visual acuity is a term for sharpness and clearness of vision. \_\_\_\_\_

- c) Although blind children may have delayed physical development due to their inability to do some physical activities, they typically do not differ in physical ability from normal seeing children. \_\_\_\_\_
- d) Visually handicapped children are usually taught the same sequence of subjects as children with normal vision. \_\_\_\_\_
- e) Many instructional procedures that are effective for normal children are also effective for visually impaired children. \_\_\_\_\_
- f) Partially seeing children who hold their books close to their eyes when reading should be instructed not to hold the materials so close. \_\_\_\_\_
- g) The residential school traditionally follows the same curriculum as other schools in the same state or region. \_\_\_\_\_
- h) Once the child has been placed in a particular type of programme, it is safe to assume that the child will remain in that programme throughout his/her school career. \_\_\_\_\_
- i) The school principal makes the decision about the type of programme that a visually impaired child should be placed in. \_\_\_\_\_
- j) Parents must consent to the collection of evaluation data and to the placement of their visually impaired child in a particular programme. \_\_\_\_\_
- k) Normative data provided for standardized tests are appropriate for use with visually impaired children. \_\_\_\_\_

- l) The community affects a blind child by not only its general attitude but also the attitude and behaviour of the neighbours, parents and peers. \_\_\_\_\_
- m) Teacher can generalize about blindness on the basis of limited experience. \_\_\_\_\_
- n) All blind have special talents like musical talent and fantastic memory. \_\_\_\_\_

VH.61 Define visually impaired children.

VH.62 Explain the meaning of an index of visual acuity that is stated as 20/150.

VH.63 From the perspective of educational definitions, now would you differentiate between a blind and partially seeing child ?

VH.64. List of the symotoms that may indicate eye problems.

a)

b)

c)

d)

e)

f)

g)

VH.65. List three possible causes of apparant retardation in the intellectual development, School achievement, and concept development of blind children.

a)

b)

c)

VH.66. List some optical aids that can be used by partially seeing children to assist them in reading.

VH.67. Technological advances have resulted in the development of a number of exciting new devices for the visually impaired. List some devices related to reading that blind people can use.

a)

b)

c)

d)

VH.68 List the five types of local day and night programs provided for visually impaired children.

VH.69. List five types of information that are used to make placement decisions for visually impaired children.



VH.70. What three types of instruments are used to assess VIC ?

VH.71. De Mott suggests that information about a number of areas be included in the educational assessment of the visually impaired. List some of these areas.

VH.72. Sighted persons feel pity for visually impaired because:

- a) Visually impaired cannot live effectively in the world of sighted.
- b) Sighted people fail to understand the strength of visually impaired.
- c) It is taught to sighted by the society.
- d) Kindness is a value.

VH.73. A visually impaired child can learn effectively if:

- a) He is given a variety of experience
- b) He is taught only through auditory mode.
- c) He is given a chance to learn.
- d) He is left to himself.

VH.74. Parents of VIC tend to overprotect because:

- a) they love their children.
- b) they hate their children

- c) they are afraid of their safety
- d) they fail to treat them as normal children.

VH.75. Daily living skills are

- a) curricular skills
- b) extra-curricular skills
- c) skills for performing day-to-day activities.
- d) skills for maintaining good health.

VH.76. Skills required for the readiness of the child to learn day-to-day survival skills are

- a) daily living skills
- b) pre-requisite skills
- c) academic skills
- d) curricular skills.

VH.77. For teaching all daily living activities,

- a) a common methodology should be followed.
- b) methodology should be based on the nature of activity.
- c) methodology is not necessary.

VH.78. Daily living skills should be taught according to

- a) age levels
- b) grade levels
- c) ability level
- d) none of the above

VH.79. Aids are necessary for teaching

- a) all daily living skills.
- b) certain daily living skills.
- c) academic and not daily living skills.

VH.80. Learning of daily living skills by an individual

- a) continues even after the schooling
- b) continues till the end of School year
- c) takes place at different time intervals
- d) takes place in pre-school years.

VH.81. Listening to music is

- a) an academic skill    b) an auditory skill
- c) a daily living skill

VH.82. Money identification and money management is

- a) an olfactory skill
- b) a daily living skill
- c) an orientation and mobility skill

VH.83. Teaching daily living skills can be regarded as

- a) a separate subject
- b) an integral part of the class lessons
- c) out of class hours activity

VH.84. Teaching household activities is

- a) mostly meant for children
- b) mostly meant for men
- c) mostly meant for adult blind women

VH.85. The abilities of the individual to move from one place to another are known as

- a) Orientation skills
- b) Plus curricular skills
- c) Mobility skills
- d) Walking skills

- VH.86. Teaching of mobility skills should be the same for all VIC.
- a) Yes, it should be the same for all
  - b) No, it depends upon the onset of blindness
  - c) No, it depends upon the daily living skills.
  - d) It depends on the capability of the teacher.
- VH.87. Orientation Skills are greatly influenced by
- a) the sense of taste.
  - b) the senses of touch and hearing
  - c) the sense of smell
  - d) the vision.
- VH.88. Widely used mobility techniques in developing countries are
- a) sighted guide techniques
  - b) guide dogs
  - c) long cane techniques
  - d) electronic aids
- VH.89. Guide dog techniques cannot serve the purpose of developing countries owing to the
- a) inadequacy of training methodology
  - b) enormous cost of the system
  - c) prejudices among visually impaired people
  - d) shortage of dogs
- VH.90. At the primary school, the VIC should
- a) not be taught O & M skills
  - b) be taught the long cane techniques
  - c) be taught the pre-cane mobility skills
  - d) be taught guide dog technique
- VH.91. In an integrated setting, the VIC can be oriented to the School environment in a better way by
- a) the sighted peer group
  - b) the regular teacher
  - c) the resource teacher
  - d) the parents.

VH.92. In an integrated setting

- a) the resource teacher has to teach all mobility skills.
- b) the resource teacher could teach O & M skills within the School Campus but not for outside travel.
- c) the resource teacher should not teach mobility
- d) the resource teacher should leave it to regular teachers to teach.

HA.93. Fill in the blanks.

- a) The part of the brain most important to hearing is the \_\_\_\_\_
- b) The human ear begins responding to sound at \_\_\_\_\_ of fetal development.
- c) A person who had a hearing loss severe enough that he cannot learn language through hearing is classified as \_\_\_\_\_.
- d) When a hearing loss is assumed to explain poor School performance, the loss would be termed \_\_\_\_\_.
- e) When there is damage or deterioration of the cochlea or VIII nerve, the hearing loss is termed \_\_\_\_\_.
- f) When a child displays weakness in auditory skills and yet shows no measurable hearing loss, a \_\_\_\_\_ should be suspected.
- g) A graphic portrayal of a person's hearing is called in \_\_\_\_\_
- h) The speech frequencies on the audiogram are \_\_\_\_\_; \_\_\_\_\_ and \_\_\_\_\_ HZ.
- i) The audiometric test that measures a person's ability to understand speech is called \_\_\_\_\_
- j) The average age at which children produce their first words is \_\_\_\_\_

- k) Severe language and speech disorders should be expected if a child's average hearing loss is greater than \_\_\_\_\_ dB and it occurs before age \_\_\_\_\_.
- l) A child whose hearing loss is greater than \_\_\_\_\_ dB is considered deaf.
- m) The medical specialist who typically deals exclusively with children is called a \_\_\_\_\_  
The medical professional who specializes in treating ear disorders is the \_\_\_\_\_.
- n) \_\_\_\_\_  
consists of techniques that help a hearing impaired child use his residual hearing as much as possible.
- o) When a hearing impaired watches a speaker's lip and facial movement, she is \_\_\_\_\_.
- p) Educators of the deaf who prohibit the use of gestures by the child are called \_\_\_\_\_.
- q) The professionals who evaluate hearing by means of audiometric testing are called \_\_\_\_\_.
- r) Educational settings for the severely hearing impaired include the \_\_\_\_\_  
and \_\_\_\_\_.
- s) The intensity or loudness of normal conversational speech at a distance of five feet is between \_\_\_\_\_ decibels.
- t) Hearing loss can affect \_\_\_\_\_  
\_\_\_\_\_ development, and put time \_\_\_\_\_  
\_\_\_\_\_ and \_\_\_\_\_  
adjustment.
- u) Hearing aids make sounds \_\_\_\_\_  
and they do not make sounds \_\_\_\_\_.

- v) For educational purposes, children with hearing disorders are classified as either \_\_\_\_\_ or \_\_\_\_\_.
- w) The philosophy of total communication makes use of both \_\_\_\_\_ and \_\_\_\_\_ procedures to teach deaf children.

HH.94. Write "True" or "False"

- a) Earwax is dirt and should be cleaned from the ears. \_\_\_\_\_
- b) Children's hearing cannot be tested accurately until they are six years of age. \_\_\_\_\_
- c) The normal child established an auditory feedback loop at three months of age. \_\_\_\_\_
- d) Deaf individuals are two to five years mentally retarded as compared to individuals with normal hearing. \_\_\_\_\_
- e) The reading skills of deaf individuals may lag as much as eight to nine years behind those of their hearing peers. \_\_\_\_\_
- f) Hearing aids are electronic devices that always make sound clearer. \_\_\_\_\_
- g) Seventy to eighty percent of the sounds in our language are visible on the speaker's lips. \_\_\_\_\_
- h) Language and speech delay can result from recurrent ear infections. \_\_\_\_\_

i) Hearing aids are never appropriate for children with conductive hearing loss.

j) The classroom teacher should use exaggerated lip movement and speak loudly to assist the hearing impaired child.

k) The manual approach to communication stresses speech reading and auditory training.

l) The intensity range for average conversational speech is 40-65 db

HH.95. What are the three basic components of a sound system ?

HH.96. How would you define sound ?

HH.97. List the five major types of hearing loss.

HH.98. What are four signs that might indicate a hearing loss ?

HH.99. List the different types of audiometric test.



HH.100. What are some major areas of development and adjustment for those with hearing loss ?

HH.101. What are four reasons that a child's hearing aid might squeal ?

HH.102. What are the reasons a physician might suspect a hearing loss in a newborn baby ?

HH.103. Name some signs of possible hearing loss that a classroom teacher should watch for.

HH.104. Read the following and tick the correct answer.

104.1 The resource teacher works closely with the disabled child in collaboration with

- a) regular teachers      b) parents
- c) physicians and other specialists
- d) all.

- 10.4.2 The prerequisites of resource room teaching are ;
- a) a visiting resource teacher
  - b) a very big resource room
  - c) 10-20 hearing impaired children
  - d) none of the above.
- 104.3 Do all hearing impaired students require resource facility ?
- a) all
  - b) mild and moderate
  - c) moderate and severe
  - d) severe and profound
- 104.4. Periodic assessment is done by the resource teacher in order to
- a) correct speech
  - b) develop resource facilities
  - c) arrange parent-teacher conferences
  - d) know the level of performance and adjustment of the child.
- 104.5 What kind of exercises are required to develop correct pronunciation in hearing impaired.
- a) the use of finger spellings
  - b) similar sounds in the minimal pairs
  - c) adjustment in the regular class
  - d) none of the above.
- 104.6 The administrators and heads of regular schools should
- a) not allow the hearing impaired to be admitted in their school.
  - b) encourage the admission of the hearing impaired child to their school.
  - c) consult higher authorities about such admission
  - d) consult parents of other children about such admissions.

- 104.7 To give the maximum benefit of instruction to the hearing-impaired child, the regular classroom teacher
- a) should speak very slowly
  - b) should speak very loudly
  - c) should make some changes in the style of his teaching and behaviour.
  - d) should not put questions to him
- 104.8 The hearing-impaired can substantially hear and understand others if.
- a) he is given nearly auditory training and practice in speech reading.
  - b) he is very intelligent.
  - c) he is given some special diet.
  - d) he is very healthy.
- 104.9 The most important role in successful integration of a hearing-impaired child in a regular school is of
- a) the head of the School
  - b) the non-teaching staff of the School
  - c) the hostel staff
  - d) the class teacher
- 104.10 The hearing impaired child can do better than his hearing peers.
- a) in all activities of the School
  - b) in co-curricular and extra-curricular activities.
  - c) in any particular academic subject
  - d) in following class instruction
- 104.11 Generally, the hearing impaired child has defective
- a) physique
  - b) language and speech
  - c) social attitudes
  - d) mental growth

104.12 The desirable or undesirable behaviour of hearing students of a class towards the hearing impaired child depends very much on

- a) how the head of the School treats him.
- b) how the other staff members treat him.
- c) how other children of the School behave with him .
- d) how the class teacher treats him.

104.13 The hearing impaired child can understand his teacher's speech better if

- a) the classroom is well lighted
- b) the classroom has ordinary light.
- c) the classroom has special furniture for him.
- d) the classroom has special material for him.

104.14 The shortcomings of hearing impaired child can be overcome by the

- a) head of the school
- b) class teacher
- c) resource teacher in a resource room
- d) parents.

104.15 The successful integration of a hearing impaired child in a regular school depends on the attitude of the

- a) head of school alone
- b) staff members only
- c) parents of hearing children
- d) all who come in contact with him.

HH 105 Give the various degrees of hearing loss.

LD106 What are Wallace and McLoughlin's four dimensions of learning disabilities ?

LD107 List the seven academic areas in which an LD child may have a severe discrepancy between ability and achievement.

LD108 What are the three primary objections to labeling a child as learning disabled ?

LD109 In order to be called a characteristic, difficulties that children with learning disabilities have must be

LD110 Give the seven educational characteristics of reading disability.

LD 111. What are the factors related to reading disabilities ?

OH 112. Write "True" or "False".

- a) The term "Proximodistal" is used to refer to the process whereby the child gains control of the muscles in the trunk before gaining control of muscles in the fingers.
- b) Cerebral palsy is caused by brain damage.
- c) There is higher incidence of speech disorders, sensory disorders and mental retardation in the cerebral palsied population than in the 'normal' population.
- d) Cerebral palsy is rarely accompanied by convulsive disorders.
- e) Cerebral palsied children do not attend public Schools.
- f) Most children with osteogenesis imperfecta (congenital bone-disease) have normal intellectual ability.
- g) Most children with cystic fibrosis (genetic disorder affecting pancreas/lungs) die during childhood.
- h) Epilepsy is treated primarily through chemotherapy (drug administration to control the problem).

- i) In treating a person having a grand mal seizure (severe convulsive disorder involving loss of consciousness), it is wise to place a pencil or tongue depressor between the teeth to prevent swallowing of the tongue. \_\_\_\_\_
- j) A lavatory stall can be made accessible to all persons in wheelchairs by placing grab bars at convenient heights. \_\_\_\_\_
- k) Thick door mats should be used in front of doors to give wheelchair travelers better traction on wet days. \_\_\_\_\_
- l) Open-riser stairs are particularly well suited for persons who are wearing braces. \_\_\_\_\_

OH 113. Fill in the blanks.

- a) The suffix that means paralysis, or inability to move, is \_\_\_\_\_
- b) \_\_\_\_\_ means before birth, \_\_\_\_\_ means during birth, and \_\_\_\_\_ means after birth.
- c) A condition characterized by low tolerance for exercise is \_\_\_\_\_
- d) Children with asthma typically have difficulty in \_\_\_\_\_
- e) Diabetes is controlled through \_\_\_\_\_
- f) A temper tantrum may sometimes be confused with \_\_\_\_\_ seizure.

- g) A child who falls to the ground, thrashes around and loses bladder control may be suffering from a \_\_\_\_\_ seizure.
- h) The type of seizure that often goes unnoticed is a \_\_\_\_\_.
- i) Standards for the elimination of architectural barriers have been developed in USA by an organization called \_\_\_\_\_.
- j) Doorways should be at least \_\_\_\_\_ inches wide to accommodate wheel chairs.
- k) Ramps should be at least \_\_\_\_\_ feet wide.
- l) Lavatory towel dispensers and other appliances should be mounted no more than \_\_\_\_\_ inches above the floor.
- m) Obstructions on walkways should not be more than \_\_\_\_\_ high or they may cause travel problems.

OH 114. Name the ambulation disabilities caused by cerebral and noncerebral factors.

OH 115. Name the disabilities that affect vitality.

OH 116. Name the convulsive disorders (epileptic seizures).



OH 117. Name different types of cerebral palsy.

OH 118. Name the disorders associated with cerebral palsied population.

OH 119. Which type of supportive service is used to minimize muscular deterioration in children with diseases such as muscular dystrophy, spinal muscular atrophy, and polio.

OH 120. When is it necessary to call in professional help for a child having a grand mal seizure ?

OH 121. Differentiate between a prosthesis and a orthosis.

OH 122. When would it be inappropriate to recommend an assistive or adaptive device for use by a person with physical disabilities ?

OH 123. Describe the conditions under which you would recommend that orthopedically handicapped children be placed in the regular classroom for their education.

OH 124. What criteria would you propose for selecting physically disabled children for placement in a self-contained special class ?

OH 125. List one question you should ask a physically disabled child's parents in each of the following areas to help develop procedures for carrying for the child.

- a) Medical
- b) Travel
- c) Transfer
- d) Communication
- e) Self-care
- f) Positioning

## ASSIGNMENTS

### KEY

SE 1 Components of the definition should include:

- instruction that is part of the regular education programme.
- instruction that is individually designed to meet the needs of exceptional children.
- designed for children whose needs cannot be met by the regular school curriculum.
- may call for supportive services from speech pathologists, audiologists, physical and occupational therapists, psychologists, counsellors, and others.

SE 2. The term includes all persons who may have a condition during their lifetime; prevalence includes only those who have the condition at a specific point in time.

SE 3. a) Education should be individualized.  
b) Tasks should be sequenced from easy to difficult.  
c) Students should be active learners.  
d) Learning environments should be structured.

SE 4. a) Labels lower the expectations of teachers.  
b) Labels have little relevance for educational practice.  
c) Children do not fit neatly into categories.  
d) Labeled children are stigmatized.

SE 5. a) Statement of child's level of performance  
b) annual goals.  
c) Short-term objectives.  
d) time spent in regular education environments  
e) related services  
f) projected dates for initiation of services and the anticipated duration of services.  
g) procedures for evaluation.

Contd...2/-

SE 6.

- Setting 1. Regular class placement with few or no supportive services.
- Setting 2. Regular class placement with consulting teacher assistance.
- Setting 3. Regular class placement with it inerant specialist assistance.
- Setting 4. Regular class placement with resource room assistance.
- Setting 5. Special class placement with part-time in regular class.
- Setting 6. Full-time special class.
- Setting 7. Special day school.
- Setting 8. Residential school.
- Setting 9. Homebound instruction
- Setting 10. Hospital or institution

- SE 7.
- |          |          |
|----------|----------|
| a) False | i) True  |
| b) False | j) True  |
| c) False | k) True  |
| d) False | l) True  |
| e) False | m) False |
| f) True  |          |
| g) True  |          |
| h) True  |          |

- M.R. 8.
- |          |          |
|----------|----------|
| a) True  | h) True  |
| b) False | i) True  |
| c) True  | j) False |
| d) True  | k) True  |
| e) True  | l) False |
| f) False | m) True  |
| g) False | n) True  |

- MR 9. a) IQ  
b) intelligence and adaptive behaviour  
c) academic skill, interpersonal skill, social skill and independent function.  
d) two  
e) birth and the eighteenth birthday  
f) EMR, TMR and S/PR.  
g) lack of training of foster parents  
h) rotations and reversals  
i) writing  
j) communication barrier  
k) modify  
l) small units  
m) large segment  
n) borderline intelligence

- MR 10. a) normalize  
b) mainstreaming  
c) IED  
d) common schools  
e) parents  
f) 70  
g) severe or profound  
h) physical agents  
i) their constitutional rights  
j) a majority

MR 11. d)

MR 12. b)

MR 13. a)

MR 14. a)

MR 15. d)

- MR 16(A)    a) Significantly subaverage general intellectual functioning.  
              b) Impairments in adaptive behaviour.  
              c) Manifestation during the developmental period.

MR 16(B)        2%

- MR 16(C)    a) Methodology  
              b) Type of population studied  
              c) Definition of mental retardation

- MR 17        a)    (3)  
              b)    (1)  
              c)    (4)  
              d)    (2)  
              e)    (6)  
              f)    (7)  
              g)    (8)  
              h)    (5)

- MR 18        (a) True  
              (b) False  
              (c) False  
              (d) True  
              (e) False

MR 19        b

MR 20        b

MR 21        c

- MR 22        (a) Immunization of children  
              (b) Adequate nutrition to children  
              (c) ~~Prompt~~ control of fever in children.  
              (d) Immediate control of fits in children.

MR 23        c

MR 24. c

MR 25(a) Early infantile autism

(b) Child with emotional disturbance.

(c) Specific learning disabilities.

(d) Child with hearing and/or visual handicap .

MR 26 b

MR 27 (a) (2)

(b) (4)

(c) (1)

(d) (3)

MR 28 (a) Delay in milestones

(b) Fits or physical disability.

(c) Poor scholastic performance.

MR 29 (a) (3)

(b) (1)

(c) (4)

(d) (2)

MR 30 3, 5, 4, 2, 1

MR 31 Start with infant stimulation programme.  
Stimulate the child with visual, auditory and  
tactile stimuli. Train the child in motor skills.  
Refer to a special educationist (or psychologist  
at the DRC), Physiotherapist and a speech  
pathologist for necessary follow up advice.

MR 32 This boy may not be mentally retarded as he was  
normal till 9th year. The boy should be referred to a  
psychiatrist for detailed examination as he might  
have some psychological problems resulting in the  
poor scholastic performance.

MR 33. The ~~current~~ level of functioning has to be assessed  
and a management plan has to be drawn out to train  
the child in selfhelp skills and communication skills.  
The child should be sent for regular follow up  
to the doctor and the physiotherapist.

- MR. 34 a) Developmental schedules.  
b) Verbal tests  
c) Non-verbal and performances tests.
- MR. 35 (c)
- MR. 36 VSMS
- MR. 37 Sensory and motor
- MR. 38 (a) False (e) False  
(b) True (f) True  
(c) False (g) False  
(d) True (h) True
- MR. 39 Task Analysis.
- MR. 40 a) False d) False  
b) False e) True  
c) True f) False
- MR. 41 a) Physical Integration  
b) Social Integration  
c) Societal Integration
- MR. 42 Ensure that the child has neck control place the child on the back. Hold his fingers and pull him to sitting position. See that the legs are stretched and spread apart to get balance. Support the back with the palm and slowly reduce the support. Keep toys in front of the child so that the child is busy with them.
- MR. 43 Look for the tone of the muscles of the child. Put him in standing position with support and see whether he can place both the feet uniformly on the ground and himself. Have the child hold your fingers with both his hands. Pull him up to standing position and keep talking to him as you do this. Slowly withdraw one hand and let him hold only one hand and stand. Gradually withdraw



the second hand also. Let him stand. See that his feet are placed apart to balance when you withdraw total help.

- MR. 44 See whether the child is mobile. Check for motor problems. Observe and record the time of urination and bowel movements continuously for a period of one week. Using this record as a reference take the child to toilet 3 to 5 minutes before the noted time. Use one code word always when you make him sit on the toilet or in the toilet area.
- MR. 45 decrease and increase
- MR. 46 decrease and increase
- MR. 47 Observable and measurable
- MR. 48 a) Identification of the problem  
b) Defining target behaviours  
c) Behaviour recording.  
d) Functional analysis.  
e) Treatment procedure.
- MR. 49 a) True d) True  
b) False e) False  
c) False
- MR. 50 a) Restructuring the environment  
b) Extinction  
c) Punishment  
d) Differential Reinforcement
- MR. 51 (a) Contingency (c) Consistency  
(b) Immediacy (d) Clarity
- MR. 52 (a) (4)  
(b) (3)  
(c) (1)  
(d) (2)
- MR. 53 Forward and Backward

MR. 54 (a) Fixed Ratio  
(b) Variable Ratio  
(c) Fixed Interval  
(d) Variable Interval

MR. 55 (a) Token programme  
(b) Shaping  
(c) Chaining  
(d) Prompting

MR. 56 (a) Sincerity  
(b) Reassuring  
(c) Effective communication  
(d) Emotional stability

MR. 57 (a) Mentally Retarded child can be trained.  
(b) Mental Retardation is not an infectious disease.  
(c) Mental Retardation can be prevented  
(d) Step by step training of a mentally retarded child is the key to success.

MR. 58 (a) False (c) False  
(b) True (d) True

~~MR. 59~~  
VH.59

- a) eye and the brain
- b) myopia
- c) retrolental fibroplasia (RLF) and ~~xxxx~~ maternal rubella.
- d) Retrolental fibroplasia
- e) blind or partially seeing
- f) 20/200 and 20/70
- g) visual arc.
- h) snellen chart
- i) the negative attitudes of those who can see/ the integration of blind children with seeing peers and inservice training for teachers.
- j) orientation and mobility
- k) tactile, visual and auditory
- l) residential
- m) concept
- n) forms or discriminate specified

- c) 20 feet away
- p) visual information brain
- q) 20/20 vision
- r) legally blind
- s) personality and mental make-up
- t) 20 feet                      200 feet

- VH 60.
- |          |          |
|----------|----------|
| a) False | h) False |
| b) True  | i) False |
| c) True  | j) True  |
| d) True  | k) False |
| e) True  | l) True  |
| f) False | m) False |
| g) True  | n) False |

VH 61. Visually impaired children are those who differ from normally seeing children to such an extent that it is necessary to provide them with specially trained teachers, specially designed or adapted curricular materials, and specially designed educational aids, so that they can realize ~~x~~ their full potential.

VH 62. The index of 20/150 means that an object which can be seen clearly from a distance of 150 feet by a normally seeing person must be 20 feet from the visually impaired person to be seen clearly.

VH 63. A blind child is one whose visual loss indicates that he must use braille and other tactile and auditory materials to learn. A partially seeing child has some useful vision and uses print and other visual materials in his educational programme.

- VH 64.
- a) Child appears clumsy in a new situation and has trouble walking.
  - b) Child holds head in awkward position or holds material close to eyes.
  - c) Child constantly asks someone to tell him what is going on.

- d) Child "tunes out" when information is on chalkboard or books he cannot read.
  - e) Child is inordinately affected by glare from sun and not able to see things at certain times of day.
  - f) Child has a pronounced squint, rubs eyes excessively and pushes eye ball with finger or knuckle.
  - g) Child has obvious physiological anomalies or signs of eye disease, such as red swollen lids, crusts on lids or crossed eyes.
- VH 65. a) Restrictions in the range and variety of experiences.
- b) Restrictions in the ability to move about in the environment and observe people and objects around them.
- c) Restrictions in their integration into all aspects of their environment.
- VH 66. eyeglass magnifiers; stand magnifier; hand-held magnifiers; telescopic aids; television viewers.
- VH 67. a) braille
- b) paperless brailier
- c) optacon (optical-to-tactile converter)
- d) Kurzweil Reading Machine.
- VH 68. a) Special class plan
- b) Cooperative class plan
- c) Resource room plan
- d) Itinerant teacher plan
- e) teacher consultant plan
- VH 69. a) eye examination report
- b) medical report
- c) educational assessments
- d) reports of behavioural observations by parents and teachers.
- e) any assessment information that might be helpful in placement.

- VH 70. a) those developed for visually impaired  
b) those adapted for use with visually impaired  
c) those developed for use with seeing population and used as is for visually impaired.

- |         |                   |                   |
|---------|-------------------|-------------------|
| VII 71. | Visual efficiency | motor performance |
|         | sensory abilities | language          |
|         | other impairments | intelligence      |
|         | achievement       |                   |

- |           |           |
|-----------|-----------|
| VH 72. b) | VH 82. b) |
| VH 73. a) | VH 83. b) |
| VH 74. c) | VH 84. c) |
| VH 75. a) | VH 85. c) |
| VH 76. b) | VH 86. b) |
| VH 77. b) | VH 87. b) |
| VH 78. c) | VH 88. c) |
| VH 89. b) | VH 89. b) |
| VH 80. a) | VH 90. c) |
| VH 81 c)  | VH 91. a) |
|           | VH 92. b) |

- HH.93.
- a) Cortex
  - b) fifth month
  - c) deaf
  - d) functional
  - e) sensori-neural
  - f) central auditory disorder
  - g) audiogram
  - h) 500, 1000, and 2000
  - i) speech discrimination

- j) 12 months
- k) 60-80 , 2 years
- l) 80
- m) pediatrician, Otologist
- n) Auditory training
- o) lip reading
- p) Oralists
- q) audiologists
- r) residential setting  
day school, special class and  
resource room
- s) 40 and 60
- t) speech and language  
educational, vocational social and  
emotional
- u) louder, clearer
- v) hard of hearing, deaf
- w) Oral and manual

- HH. 94. a) False                      g) False  
b) False                      h) True  
c) False                      i) False  
d) False                      j) False  
e) True                      k) False  
f) False                      l) True

- HH. 95 a) transmitter  
b) medium  
c) receiver

- HH. 96 Sound is created by the vibration of some object. This vibration is carried across some medium and can be heard by the ear.

- HH. 97    a)    conductive  
          b)    sensori-neural  
          c)    mixed  
          d)    functional  
          e)    central
- HH. 98    a)    illness or disease for mother during pregnancy.  
          b)    child does not react to sounds.  
          c)    child does not engage in normal amount of vocal play.  
          d)    child does not pay attention in class.  
          e)    child says "huh" in response to questions.  
          f)    child cannot localize sound.
- HH. 99    a)    Pure tone audiometric screening  
          b)    Pure tone threshold audiometry  
          c)    Speech audiometry  
          d)    sound field audiometry  
          e)    Behavioural play audiometry  
          f)    impedance audiometry  
          g)    evoked response audiometry
- HH.100    a)    language/speech development  
          b)    educational adjustment  
          c)    vocational adjustment  
          d)    social adjustment  
          e)    personality and emotional adjustment
- HH.101    a)    earmold<sup>s</sup> not seated properly in the ear  
          b)    earmold is too<sup>s</sup> loose  
          c)    may need new earmold  
          d)    earmold and receiver not firmly attached.

- HH.102 a) history of hereditary hearing loss  
b) infection or illness of the mother during pregnancy  
c) defects of ears, nose, or throat  
d) low birth weight  
e) prematurity  
f) accident, infections, or illness of the child.

- HH.103 a) Frequent earaches or ear discharge  
b) poor articulation, consonant sounds omitted  
c) wrong answers given to easy questions  
d) child often does not respond when called  
e) hearing appears better when child faces speaker  
f) child asks to have things repeated  
g) child turns TV or radio up too loud

HH.104

HH.104.1 d)

HH.104.2 d) 104.9 d)

HH.104.3 a) 104.10 b)

HH.104.4 d) 104.11 b)

HH.104.5 b) 104.12 d)

HH.104.6 b) 104.13 a)

HH.104.7 c) 104.14 c)

HH.104.8 a) 104.15 d)

HH.105 mild	- 20 to 40 decibels
moderate	- 40 to 60 decibels
severe	- 60 to 80 decibels
profound	- more than 80 decibels



- LD.106. a) discrepancy  
b) manifestation  
c) focus  
d) integrities
- LD.107. a) oral expression  
b) basic reading skills  
c) math reasoning  
d) written expression  
e) listening comprehension  
f) math calculation  
g) reading comprehension
- LD.108. a) labels do not really define discrete groups of individuals; they do not account for overlap between categories.  
b) little evidence exists to support the use of one educational treatment for any particular label.  
c) Biased tests can cause mislabeling.
- LD.109. a) observed consistently over time.  
b) resistant to simple remedial teaching methods.  
c) accompanied by a significant gap between achievement and ability.
- LD.110. a) Attention difficulty  
b) Perceptual problems  
c) Poor motivation/attitude  
d) Poor sound/symbol association  
e) Memory problems  
f) Language deficits  
g) Transfer difficulties
- LD.111. a) Physical  
b) Environmental  
c) Psychological

- OH.112     a)     True                          g)     True  
             b)     True                          h)     True  
             c)     True                          i)     False  
             d)     False                       j)     False  
             e)     False                      k)     False  
             f)     True                       l)     False
- OH.113     a)     plegia  
             b)     Pre-natal,                  Peri-natal,  
   Post-natal  
             c)     congenital heart defect  
             d)     breathing  
             e)     diet and medication                  (insulin)  
             f)     psychomotor  
             g)     grand mal  
             h)     petit mal seizure  
             i)     ANSI  
             j)     32  
             k)     four  
             l)     40  
             m)     half inch
- OH.114.     a)     cerebral palsy  
             b)     muscular dystrophy  
             c)     polio  
             d)     spina bifida  
             e)     spinal muscular atrophy  
             f)     spinal cord injuries  
             g)     arthrogryphosis  
             h)     osteogenesis imperfecta  
             i)     Juvenile rheumatoid arthritis  
             j)     Other musculoskeletal disorders

- OH.115.    a)    Congenital heart defects  
            b)    Cystic fibrosis  
            c)    diabetes  
            d)    asthma
- OH.116.    a)    Petit Mal  
            b)    Grand Mal  
            c)    Psychomotor
- OH.117.    a)    spastic  
            b)    athetosis  
            c)    ataxia  
            d)    rigidity  
            e)    tremor  
            f)    mixed
- OH.118.    a)    Communication disorders  
            b)    Sensory disorders  
            c)    Intellectual ability  
            d)    Convulsive disorders
- OH.119.    Physical Therapy
- OH.120.    When seizure activity continues for more  
            than five minutes, or when it appears  
            that the person is going into repeated  
            grand mal seizures.
- OH.121.    A prosthesis replaces a body part  
            and an orthosis supports or assists the  
            body.
- OH.122.    When a careful evaluation of the potential  
            effect of the device has not been conducted.

- OH.123. When medical, travel, transfer and lifting, self-care, and positioning needs can all be appropriately met in the regular classroom.
- OH.124. The existence of specific problems that would seriously interfere with the children's education in the regular classroom or medical, transfer and lifting, self-care, or positioning needs that can only be met by placement in the self-contained special class.
- OH.125. a) Medical Does the child take medication ?  
if so, how often and in what amounts ?
- b) Travel Does the child require special arrangements to travel within the school building or the classroom ?
- c) Transfer How is the child transferred on and off the School bus ?
- d) Communication Can the child make his needs known to the teacher ? How ?
- e) Self-Care What special equipment does the child need ?
- f) Positioning What positions are best for specific academic activities ?

### श्रवण दोष वाले बच्चों को पहचान के लिए प्रश्नसूची

- क्या बच्चा निर्देश को धुनः बोलने के लिए अनुरोध करता है ?
- क्या बच्चे में स्पष्ट दिखने वाला कानों का कोई दोष मौजूद है ?
- क्या बच्चे का कान बहता है ?
- क्या बच्चा समसामान्यतया कानों में दर्द होने की शिकायत करता है ?
- क्या बच्चा ठीक से धुनने के लिए ध्वनी को तरफ घुमता है ?
- क्या बच्चा आपके निर्देशों का समाधान करने में अपने को असमर्थ पाता है ?
- क्या अक्सर बच्चा अपने कानों में उँगुलियाँ डालता रहता है ?
- 5 क्या बच्चा किसी बोलने वाले को बात को समझने के लिए अपनी दृष्टि उसके चेहरे पर टिकाए रहसता है ?
- जब अध्यापक कक्षा में कुछ मौखिक समझाता है तो क्या बच्चा उसे लिखने में अपने साथी को मदद लेता है ?

### वाणि दोष को पहचान के लिए प्रश्नसूची

- क्या बच्चे के बोलने वाले अंग में कोई स्पष्ट दिवाई दिखने वाली गल्लड़ी है ?
- क्या शब्दों तथा वाक्यांशों को बच्चा प्रायः स्वाभाविक रूप से तोड़ता है ?
- क्या अध्यापक के बार-बार सुधारवाचक परिश्रम के अतिरिक्त बच्चा अक्सर अशुद्ध उच्चारण करता है ?
- क्या बच्चा सामूहिक गतिविधियों में भाग लेने में हिचकिचाता है ?

### दृष्टि दोष युक्त बच्चों को पहचानने के लिए प्रश्नसूची

- आँखों का काम करने के बाद सिर दर्द को शिकायत करता है ।
- प्रायः आँखें झपकाता है ।
- श्यामपट्ट से कुछ लिखते समय प्रायः आसपास के बच्चों से पूछता रहता है ।
- पुस्तक तथा अन्य चीजों में २ को भी आँख के बहुत पास ले जाकर देखता है ।
- एक आँख टक कर सिर आगे की ओ झुका देता है ।
- बार-बार आँखों को नलता है ।
- आँखों की पुतलियों के आकार अलग-अलग होते हैं ।
- आँख की पलकों में सजन या किनारे का लाल होना ।
- प्रकाश के प्रति अधिक संवेदनशील जान पड़ता है ।
- चीजों को पूरी पहचानने के लिए देखने की कोशिश में शरीर को झुकता है ।

- पढ़ने को अवधि में उसका ध्यान केन्द्रित नहीं रह पाता है ।
- आँखों से पानी आता है ।
- आँखों को धूलके बहुत ज्यादा होती है और बार-बार झपकाता है ।
- चलते समय गलत कदम रखता है ।

#### त्रिकलांग वच्चों को पहचानने के लिए प्रसङ्ग

- बालक को पेशी का खराब नियंत्रण तथा उठते-बैठने का अभाव, वच्चा दो या अधिक परिस्थितियों को क्रिया के बीच सम्बन्ध में असमर्थ ।
- लड़के ढंग से चलता है या चलने में झटका आकर रुकता-डुलता है ।
- शारीरिक शारीरिक व्यायाम के समय दर्द के लक्षण प्रदर्शित करता है ।
- हिलते-डुलते हुए चलता है ।

#### स्वास्थ्य को समस्या से ग्रस्त वच्चों को पहचानने के लिए प्रसङ्ग

- बहुत आशानों से थक जाता है ।
- अत्यधिक बेचैनी ।
- बहुत धोखा और निश्चय ।
- व्यायाम के बाद प्रायः तारा लेने में दिक्कत ।
- प्रायः पूछो छाँओ रहा करता है, सोने में दर्द हो शिकायत करता है । शारीरिक आ/अवधान के बाद ऐसा होता है ।
- गालों, होठों तथा उँगलियों को नोचने का यह एवज नोचता बना रहता है ।
- बहुत अधिक असावधानियों की स्थिति पनी रहती है ।
- प्रायः भूखा / बेहोशी आती है ।
- बहुत जल्दी क्रोधित होता है, उत्तेजित हो जाता है, बिना किसी कारण के उसने ध्वसात्मक प्रवृत्ति जगा करती है ।

#### मानसिक रूप से पिछड़े वच्चों को पहचानने के लिए लक्षणों को ध्यान

- शैक्षणिक उपलब्धियाँ लगातार न्यून होती है ।
- अर्त्त वस्तुओं के प्रस्तुतीकरण पर बहुत अधिक निर्भर रहता है ।
- अवधान को परिधि बहुत छोटी होती है ।
- स्मरण शक्ति को अवधि भी कम होती है ।
- आत्मविश्वास बहुत ही अस्पष्ट होती है ।
- आत्मविश्वास का अभाव होता है ।

- पढ़ने की अधिष्ठा में उसका ध्यान केन्द्रित नहीं रह पाता है ।
- आँखों से पानी आता है ।
- आँखों का लगे बहुत ज्यादा होती है और बार-बार झपकाता है ।
- बल्बो जल गल्ल कद रेंझता है ।

#### क्रियाशील बच्चों को पहचानने के लिए प्रश्नसूची

- बालक को रोशनी का स्राव नियंत्रण अथवा उसी तालेल का अभाव, बच्चा दो या अधिक रोशनी को क्रिया के बीच समन्वय में असमर्थ ।
- बच्चा ठग से चलता है या चलने में हटका जाकर एक्तरफ़ झुकता है ।
- शारीरिक सार्वभौमिक व्यापार के जन्य दर्द के लक्षण प्रदर्शित करता है ।
- हिलते झुकते हुए चलता है ।

#### स्वास्थ्य को नुकसान से ग्रस्त बच्चों को पहचानने के लिए प्रश्नसूची

- बहुत आसानी से थक जाता है ।
- अत्यधिक भूखें ।
- बहुत धीरे या और निर्लज्ज ।
- व्यापार के बाद प्रायः सोने में दिक्कत ।
- प्रायः भूखी खाँसी रहता रहती है, सोने में दर्द की शिकायत करता है । सार्वभौमिक व्यापार के बाद ऐसा होता है ।
- गालों, होंठों तथा उँगलियों की नोकों का रंग हल्का नीला बना रहता है ।
- बहुत अधिष्ठा असावधानी की स्थिति बनी रहती है ।
- प्रायः छर्छा / बेहोशी आती है ।
- बहुत जल्दी झोटा आता है, उत्तेजित हो जाता है, बिना किसी कारण के उसी ध्वस्त-क प्रवृत्ति जगा करती है ।

#### मानसिक स्वास्थ्य में पिछड़े बच्चों को पहचानने के लिए लक्षणों की सूची

- शैक्षणिक उपलब्धियाँ लगातार न्यून होती है ।
- अर्त्त वस्तुओं के प्रस्तुतीकरण पर बहुत अधिष्ठा निर्भर रहता है ।
- अवधान को परिधि बहुत छोटी होती है ।
- कारण शक्ति को अधिष्ठा भी कम होती है ।
- आत्मजिघृषा बहुत ही अस्पष्ट होती है ।
- आत्मविश्वास का अभाव-होता है ।

### श्रवण दोष वाले बच्चों को पहचान के लिए प्रश्नसूची

- क्या बच्चा निर्देश को सुनः बोलने के लिए अनुरोध करता है ?
- क्या बच्चे में स्पष्ट दिखने वाले कानों का कोई रोज़ मोड़ है ?
- क्या बच्चे का कान बहता है ?
- क्या बच्चा समसामान्यतया कानों के दर्द होने को शिकायत करता है ?
- क्या बच्चा ठीक से सुनने के लिए ध्वनी की तरफ घुमता है ?
- क्या बच्चा आपके निर्देशों का समाधान करने में अपने को असमर्थ पाता है ?
- क्या अक्सर बच्चा अपने कानों में उँगुलियाँ डालता रहता है ?
- 5. क्या बच्चा किसी बोलने वाले को बात को समझने के लिए अपनी दृष्टि उसके चेहरे पर टिकाए रहता है ?
- जब अध्यापक कक्षा में कुछ मौखिक समाधान देता है तो क्या बच्चा उसे लिखने में अपने साथी को मदद लेता है ?

### वाणि दोष को पहचान के लिए प्रश्नसूची

- क्या बच्चे के बोलने वाले अंग में कोई स्पष्ट दिवाई दिखने वाली गड़बड़ी है ?
- क्या शब्दों तथा वाक्यांशों को बच्चा प्रायः स्वाभाविक रूप से तोड़ता है ?
- क्या अध्यापक के बार-बार सुधारवाचक परिवर्तन के अतिरिक्त बच्चा अक्सर अशुद्ध उच्चारण करता है ?
- क्या बच्चा साप्ताहिक गतिविधियों में भाग लेने में हिचकिचाता है ?

### दृष्टि दोष युक्त बच्चों को पहचानने के लिए प्रश्नसूची

- आँखों का काम करने के बाद सिर दर्द को शिकायत करता है ।
- प्रायः आँखें झपकाता है ।
- श्यामपट्ट से कुछ लिखते समय प्रायः आसपास के बच्चों में घूँसता रहता है ।
- पुस्तक तथा अन्य चीजों में २ को भी आँख के बहुत पास ले जाकर देखता है ।
- एक आँख ढक कर सिर आगे की ओर झुका देता है ।
- बार-बार आँखों को मलता है ।
- आँखों की पुतलियों के आकार अलग-अलग होते हैं ।
- आँख को पलकों में सज्ज या किनारे का लाल होना ।
- प्रकाश के प्रति अधिक संवेदनशील जान पड़ता है ।
- चीजों को पूरी पहचानने के लिए देखने की कोशिश में शरीर को अकड़ता है ।



- जब किसी अक्षर को निकालने के लिए कहा जाता है तो वह इस प्रकार का कार्य करने में असमर्थ होता है ।
- कहने पर यही अक्षर नहीं बता पाता है ।
- अकारि दीर्घ विभक्तियों में दिक्कत महसूस करता है । कभी एक विभक्तियों में अकारि लीता है, कभी कई विभक्तियों, जो मिल कर एक विभक्ती के रूप में बढ़ाए जाते हैं ।



## विकलांग बच्चों के लिए समेकित शिक्षा की योजना

### 1. प्रस्तावना :

देश में स्वतंत्र्योत्तर अवधि में शैक्षिक अवसरों में अद्भुत विस्तार हुआ है। फिर भी, विकलांग बच्चे शैक्षिक सुविधाओं के इस विकास से पर्याप्त रूप से लाभान्वित नहीं हुए हैं। अतः राष्ट्रीय शिक्षा नीति, 1986 के अनुसार बच्चों के इस वर्ग की शिक्षा को एक समान शैक्षिक अवसरों को व्यवस्था के अन्तर्गत करके दिया है। राष्ट्रीय शिक्षा नीति, सामान्य स्कूलों में धीरे चलने वाले विकलांगों तथा अन्य मध्यम विकलांगों की शिक्षा की सिफारिश करती है। नीति का उद्देश्य है कि समान भागीदारों के रूप में आम समाज के साथ विकलांगों को समेकित करना, उन्हें सामान्य विकास के लिए तैयार करना और उन्हें सहस तथा विकास के साथ जीवन का सामना करने के योग्य बनाना। राष्ट्रीय शिक्षा नीति को कार्यान्वित करने के लिए बनाई गई कार्यवाही योजना में प्राथमिक शिक्षा के सार्वजनिकरण के लक्ष्य को प्राप्त करने के लिए विकलांग बच्चों के लिए शैक्षिक प्रावधानों के विस्तार को पारकल्पना की गई है।

### 2. लक्ष्य तथा उद्देश्य :

विकलांग बच्चों के लिए केन्द्रीय प्रायोजित समेकित शिक्षा योजना सामान्य स्कूलों में विकलांग बच्चों के लिए शैक्षिक अवसरों को प्रदान करने का दावा करती है। धीरे चलने वाले तथा अन्य विकलांग बच्चों के लिए अतिरिक्त किया गया योजना यह सिफारिश करती है कि अन्य वे विकलांग बच्चे जिनके विशेष स्कूलों में रखा गया है, उन्हें भी समान स्कूलों में समेकन के लिए उस समय प्रोत्साहित किया जाना चाहिए जब कार्यात्मक स्तर पर सम्प्रेषण तथा दैनिक जीवन के कौशल अर्जित कर लें।

### 3. योजना का प्रारूप :

यह एक केन्द्रीय प्रायोजित योजना है जिसके अन्तर्गत केन्द्र सरकार योजना में निर्धारित मानदंडों के आधार पर, योजना को कार्यान्वित करने को लक्ष्य राज्यों/संघ शासित क्षेत्रों के प्रशासनों की सहायता प्रदान करेगी। योजना में शामिल की गई सभी मदों के लिए सहायता शत प्रतिशत आधार पर होगी लेकिन कार्यक्रम के लिए सहायता योजना में यथा निर्धारित तकनीकी योग्य स्टाफ के पूर्व सृजन पर प्रतिनिधित्व होगी।

#### 4. विध्यान्वयन रेजिमेंसियां :

यह योजना शिक्षा और/अथवा विध्यांगी के पुनर्वासि के क्षेत्र में अनुभव रखने वाले प्रतिष्ठित, स्वायत्त संगठनों/राज्य सरकारों/संघ आगत क्षेत्र के प्रशासकों के जोर पर विध्यान्वयन को जासगी क्यों कि यह योजना स्कूल में लागू की जानी है, अतः विध्यान्वयन रेजिमेंसियां शिक्षा विभाग होगी । राज्य सरकार जैसा भी समीच हो इस पारियोजनाय स्वैच्छिक संगठनों को सहायता ले सकती है ।

#### 5. क्षेत्र :

विध्यांग बच्चों के लिये इस योजना के अन्तर्गत गो 14 सुविधाएं प्रदान करने का प्रस्ताव है, वे इस प्रकार हैं :-

- ॥क॥ गांव विषयक विध्यांग ॥हड्डी विध्यांग॥ वाले बच्चे ।
- ॥ख॥ कम और साधारण श्रवण क्षातग्रस्त श्रेणियां । और ।।
- ॥ग॥ आंशिक रूप से दृष्टिहीन बच्चे ॥श्रेणियां । और एक आंख वाले
- ॥घ॥ विद्वान से विध्यांग - दुर्घट-लाघ्य 50-70 वाले शिक्षणीय वर्ग
- ॥ङ॥ बहुबांध रूप से विध्यांग बच्चे ॥नेत्रहीन और हड्डी विध्यांग, श्रवण क्षातग्रस्त और हड्डी विध्यांग, शिक्षणीय मानातक रूप से मन्द बुद्धि और हड्डी विध्यांग, दृष्टि क्षातग्रस्त और अल्प श्रवण विध्यांग॥ ।

॥च॥ सीखने को असमर्थता वाले बच्चे ।

निम्नलिखित विध्यांग बच्चों को भी तैयार करने के बाद सामान्य स्कूलों में समीकित किया जा सकता है :-

॥छ॥ दृष्टि से क्षातग्रस्त बच्चे ॥श्रेणी 11, 111 और 1111॥

॥ज॥ गंभीर श्रवण क्षातग्रस्त बच्चे ॥श्रेणियां 111 और 1111॥

योजना के क्षेत्र में विध्यांग बच्चों के लिये पूर्ण स्कूल प्राशिक्षण और माता-पिता को परामर्श देना शामिल है । यह एक ऐसी गांतीबांध होगी जो निधामित स्कूल पद्धति में आने वाले बच्चों के लिये प्रारंभिक होगी । इसमें अन्य बातों के साथ-साथ श्रवण विध्यांग बच्चों के लिये विशेष प्राशिक्षण, दृष्टि विध्यांगों के लिये गतिशीलता और अनुस्थापन, माता-पिता को परामर्श तथा इन बच्चों के गृह प्रबन्ध में प्राशिक्षण शामिल है ।

इन योजना के अन्तर्गत विध्यांग बच्चों की शिक्षा तिसीनयर सेकेन्ड्री स्कूल स्तर तक जारी रहेगी और तिसीनयर सेकेन्ड्री स्तर के समकक्ष व्यवसायिक पाठ्यक्रम शामिल है ।

कोई भी सेवा विक्लांग बच्चा जिसे राज्य/केन्द्र सरकार की किसी अन्य योजना के अन्तर्गत कोई छात्रवृत्ति/सहायता मिल रही है, वह इस योजना के अन्तर्गत किसी भी लाभ का पात्र नहीं होगा।

6. विधान्वयन के लिए विद्या-विवाध :

विधान्वयन स्कीम्स द्वारा कार्यक्रम को विकलांग बनने, अनुश्रवण करने तथा मूल्यांकन करने के लिए उप निदेशक के पद वाले एक अधिकारी के अन्तर्गत एक प्रशासनिक सेल स्थापित करना चाहिए। इन अधिकारियों का चयन इस क्षेत्र में इनकी विशेष अर्हताओं के आधार पर किया जाएगा, अथवा यदि वे उतने योग्य नहीं हैं तो रा.शे.अ.प्र.पार. अथवा अन्य पदनामित संगठन द्वारा संचालित एक कार्यक्रम में प्रोशिक्षित किया जाएगा। यह सेल योजना के विधान्वयन के लिए क्षेत्रों तथा संस्थाओं का पता लगाएगा।

योजना के विधान्वयन को उपयुक्त रूप से आयोजना को तैयार करने तथा उनका पर्यवेक्षण करने के उद्देश्य से, इस योजना के अन्तर्गत राज्य भर में स्कूलों को इधर-उधर विखेर कर स्थापित करने की अपेक्षा, योजना के संचालन के लिए कई विकासशील खंडों का चयन किया जाना चाहिए। एक चुने हुए खंड के क्षेत्र में सभी विद्यार्थियों को निदेश उपलब्ध कराए जाने चाहिए तथा विक्लांग बच्चों को अतिरिक्त सुविधाएं प्रदान करने के लिए स्कूलों को शामिल किया जाना चाहिए।

विवाधन्न श्रेणियों के अन्तर्गत विक्लांग बच्चों का सर्वेक्षण चुनिन्दा क्षेत्रों में आरंभ किया जाएगा। सर्वेक्षण करते समय, स्कूल जाने वाले बच्चों की भी जांच की जाएगी ताकि विक्लांग बच्चों का पता लगाया जा सके और अवरोधन को हटाकर उनकी शैक्षिक आवश्यकताओं और यू.पी.ई. के निर्धारित लक्ष्य प्राप्त करने के लिए उन्नत उपलब्ध को पूरा किया जा सके।

राज्य स्तरीय सेल उपकरण, अध्ययन सामग्री, स्टाफ का प्रशिक्षण आदि की व्यवस्था के जरिए विक्लांग बच्चों की शिक्षा की व्यवस्था करने के लिए संस्थाओं के लिए सुविधाओं की योजना बनाएगा। सेल विक्लांग बच्चों के मूल्यांकन के लिए तंत्र भी स्थापित करेगा। राज्य स्तर पर योजना का मूल्यांकन और अनुश्रवण सेल द्वारा पूरा किया जाएगा। सेल इस बात को सुनिश्चित करेगा कि योजना के सम्बन्ध में सूचना व्यापक रूप से परोचित है।

## 7. प्रशासनिक सेल :

राज्य शिक्षा विभाग द्वारा स्थापित किए जाने वाले प्रशासनिक सेल के पास एक उप निदेशक राज्य सरकार में रहने वाले नैतनमान अनुसार, एक समन्वयक [जो एक मनोवैज्ञानी होगा] उस नैतनमान में जो एक विश्वविद्यालय के प्रवक्ता को दिया जाता है, राज्य/संघ शासित क्षेत्र में लागू नैतनमानों में एक आंशालोपक तथा अंतर श्रेणी लोपक होगा ।

## 8. शिक्षांग वच्चों का मूल्यांकन :

कार्ड्रम का समन्वयक वच्चों के मूल्यांकन तथा चल रहे आधार पर उनकी प्रगति को मोनटर करने के लिए उत्तरदायी होगी । मूल्यांकन करने के लिए तीन सदस्यों से युक्त एक दल का गठन किया जाएगा जिसमें एक डाक्टर, एक मनोवैज्ञानी, और एक विशेष शिक्षक होगा । राज्य/संघ शासित क्षेत्र मूल्यांकन दल प्रशासनिक सेल के अन्तर्गत कार्य करेगा । विशेषज्ञ राज्य स्वास्थ्य विभाग के परामर्श से लिए जाएंगे । जहाँ कहीं जिला पुनर्वासि केन्द्र स्थापित हो गए हैं, मूल्यांकन के लिए इनके सहायकों का उपयोग किया जाएगा ।

एक मूल्यांकन की औसत लागत 150/-रु. प्रति शिक्षांग वच्चा से अधिक नहीं होनी चाहिए । यही मात्रा में उन वच्चों को जांच करना आनायाई होगा जिन्हें एक समीक्षित कार्ड्रम में स्थापना के लिए उपयुक्त समझा गया है । मूल्यांकन दल के सदस्यों को यात्रा-भत्ता और महंगाई भत्ता से नान्यतमों के अनुसार दिया जाएगा ।

प्रत्येक राज्य की राजधानी अथवा जिला मुख्यालय अथवा ऐसा अन्य कोई स्थान जहाँ समीक्षित स्कूल पद्धति में 50 अथवा इससे अधिक वच्चे नामांकित किए गए हों, एक मूल्यांकन केन्द्र होगा । जहाँ कहीं भी योजना को अभी आरंभ किया जाना है ऐसे एक जिला मुख्यालय अथवा राज्य राजधानी अथवा कोई स्थान जहाँ राज्य सरकार की राज्य में न्यूनतम 150 वच्चे प्रति वर्ष मूल्यांकन की आवश्यकता होगी, एक मूल्यांकन दल उपलब्ध कराया जा सकता है ।

शैक्षिक कार्ड्रम तैयार करने के लिए मूल्यांकन रीपोर्ट अपेक्षाकृत व्यापक रूप से चड़ी होनी चाहिए । एक विशेष वच्चा जो परीक्षण संबंधी पारास्थितियों के दौरान कर सकता है अथवा नहीं कर सकता है, उसके सम्बन्ध में पर्याप्त सूचना भेजी जानी चाहिए । रीपोर्ट में यह उल्लेख विशेषांक रूप से किया जाना चाहिए कि क्या वच्चे को स्कूल में प्रत्यक्ष रूप से भेजा जा सकता है अथवा इस परियोजनाई

गैर-सहयोग से राजपूत विधवा विधवा केन्द्र में विशेष स्कूल/विशेष आरंभिक कक्षा में तैयार किया जा सकता है ?

9. विधवा वधवा के लिए सुविधाएं :

1. सम्बन्धित राज्य/संघ शासित क्षेत्र में अभिभावक दरों पर निम्न-लिखित स्तर की सुविधाएं एक विधवा वधवा को दी जाये। यदि अन्य किसी योजना के अन्तर्गत राज्य सरकार/संघ शासित क्षेत्र के प्रधान द्वारा ऐसे ही प्रोत्साहन उपलब्ध नहीं कराए जाते हैं तो निम्नलिखित दरों को अपनाया जाये :-

॥क॥ वार सौ रुपए प्रति वर्ष की पुस्तकें तथा लेखन सामग्री भत्ता ।

॥ख॥ दो सौ रुपए प्रति वर्ष की वस्त्रों भत्ता ।

॥ग॥ वार सौ रुपए प्रति माह की दर से पोषण भत्ता ।

यदि योजना के अन्तर्गत दाखिल विधवा छात्र स्कूल परिसर में निवृत्त छात्रावास में रहता है तो कोई भी पोषण भत्ता प्रभार अनुमान्य नहीं होगा ।

॥घ॥ वधवा - ६ के बाद क्षेत्र हीन वधवा के मामले में 50 रु. प्रति माह का भत्ता भत्ता ।

॥ङ॥ गरीब रूप से उन विधवा वधवा के लिए जो शरीर के नीचे तहस्ते से विधवा हैं जो 75/- प्रति माह का भत्ता भत्ता ।

॥च॥ वधवा वर्ष की आयु के लिए अधिकतम 2000/- रु. प्रति छात्र के आधार पर उपकरण की वास्तविक लागत ।

2. उन गरीब रूप से हड्डी विधवा वधवा के मामले में, एक स्कूल 10 वधवा के लिए एक पोषण की अनुमति देना अनिवार्य हो सकता है । पोषण की संबंधित राज्य/संघ शासित क्षेत्र में कक्षा - 4 के कर्मचारियों के लिए निर्धारित मानक वेतनमान दिया जाना चाहिए ।

3. उसी संस्था में जहां वे विधवा वधवा पढ़ रहे हैं, और स्कूल छात्रावासों में रह रहे हैं उन्हें भोजन तथा आवास जो भी राज्य सरकार/निधियों/योजनाओं के अन्तर्गत अनुमान्य हो, दिया जाने चाहिए । जहां छात्रावास में रहने वालों के लिए कोई राज्य छात्रवृत्ति योजना नहीं है, तो वह विधवा वधवा जिसके माता-पिता की आय 300/-रु. प्रतिमाह से अधिक नहीं है, उसे अधिकतम 200/-रु. प्रतिमाह के आधार पर वास्तविक भोजन तथा आवास प्रभार दिया जाये।

4. स्कूल छात्रावासों में रह रहे गरीब स्कूल से हड़डी 10 अंग पच्चे को एक सहायक अथवा एक आवा को जरूरत पड़ सकती है। छात्रावास के उस पक्षी नी निर्धारित को 50/-रु. प्रतिमाह का विशेष भोजन अनुमान है, उन्ने पक्षी के आधार पर पच्चे को सहायता करने के लिए इच्छुक हो। इस योजना के अन्तर्गत ग्रामीण क्षेत्रों के उन स्कूलों में जहाँ कम से कम 10 अंग पच्चे दाखल है। वहाँ इन पच्चे के लिए अनिवार्य उपयोग के लिए एक स्कूल रीयल को मूल लागत तथा राशियाँ बनाने वाले के लिए 300 रु. प्रतिमाह का व्यव प्रदान किया जाएगा। ऐसे मामलों में छात्रों को वातावरण नष्टता देव नहीं होगा।

#### 10. विशेष शिक्षक सहायता :

आंग पच्चे के ओर विशेष ध्यान देने के लिए उन स्कूलों में विशेष शिक्षक शिक्षक हैं नियुक्त किए जाएंगे जहाँ यह योजना चल रही है। अन्य तथा कम सुनने वाले पच्चे के लिए विशेष शिक्षक सहायता अयोग्य है। तैयारी के पश्चात् स्वीकृत शिक्षक के अन्तर्गत बाद अधिक तथा उत्तरे कम सुनने वाले पच्चे दाखल किए जाते हैं तो उनके लिए भी विशेष शिक्षक सहायता को आ प्रदान होगी। लोको-मीटर अंगित्त वाले पच्चे के लिए विशेष शिक्षक सहायता को आवश्यकता नहीं होगी। इस प्रकार से, कम गंद सुनने वाले पच्चे के लिए विशेष शिक्षक सहायता की आवश्यकता नहीं होगी तथा इन पच्चे के लिए साधारण सा अध्यापक ही शिक्षा के कार्यक्रम को शुरू कर सकता है।

#### 11. विशेष शिक्षकों को नियुक्त :

इस योजना के अन्तर्गत विशेष शिक्षक शिक्षकों के लिए शिक्षा-छात्र अनुपात 1:8 है। यह अनुपात सामान्य कक्षाओं के साथ-साथ पूर्ण स्कूल तैयारी कक्षाओं के लिए भी पड़ी है। वहाँ शिक्षक आगमनाको को परामर्श देगा। इस अनुपात के अनुसार, विशेष शिक्षक सहायता को आवश्यकता वाले पच्चे के लिए स्कूलों में अथवा कुछ स्कूलों के समूह के लिए अयोग्य संख्या विशेष शिक्षक नियुक्त किए जाएंगे।

अर्हताएं : - नियुक्त किए गए विशेष शिक्षकों को निम्नलिखित अर्हताएं होंगी :-

१क१ प्राईमरी शिक्षक : माध्यमिक शैली अर्हता होना और 10+2 सीट्टर विशेष अभिगता वाले पच्चे को शिक्षा में एक वर्षीय पाठ्यक्रम।

१ख१ माध्यमिक : - विशेष अभिगता के विशेषज्ञता सहित एक वर्षीय को-एड्यूकेशन शिक्षा सहित स्नातक।



वेतनमान : राज्यों/संघ शासित प्रदेशों में उसी श्रेणी के शिक्षकों को मिलनेवाले वेतनमान विशेष शिक्षकों को भी वही वेतनमान देकर जायेंगे। विशेष प्रकार के कार्यों को ध्यान में रखते हुए, इन शिक्षकों को बाहरी क्षेत्रों में 150/- रु. प्रतिमाह तथा ग्रामीण क्षेत्रों में 200/- रु. प्रतिमाह का विशेष वेतन देया जाएगा। इन कार्यों के लिये शिक्षा विभाग सामान्य भर्ती पद्धति का पालन करते हुए ऐसे शिक्षकों की भर्ती कर सकता है।

## 12. विशेष शिक्षकों का प्रशिक्षण :

विशेष शिक्षकों के प्रशिक्षण के लिये अब सुविधाएँ राष्ट्रीय अंग संस्थान तथा विश्वविद्यालयों और चुनिन्दा शिक्षा कालेजों के विशेष शिक्षा विभागों में चलाने जा रहे क्षेत्रीय शिक्षा कालेजों तथा क्षेत्रीय प्रशिक्षण केन्द्रों में उपलब्ध है। प्रशिक्षण सुविधाओं को और बढ़ाया जा रहा है। राज्य सरकारें प्रत्येक श्रेणी को अपंगता के अन्तर्गत नियुक्त करके जाने वाले शिक्षकों के लिये अनुमान तैयार कर सकते हैं तथा उसे क्षेत्रीय शिक्षा कालेज, राष्ट्रीय अंग संस्थान तथा रा.शै.अ.प्र.पॉर. को सूचित करते हुए वि.अ. आयोग को भेज सकते हैं।

योजना के अन्तर्गत, विशेष शिक्षकों के लिये पूर्णकालिक प्रशिक्षण कार्यक्रमों को चलाने के लिये वि.अ.आयोग के माध्यम से अनुदान देया जाएगा। विश्वविद्यालयों/प्रशिक्षण संस्थाओं से यह आशा की जाती है कि वे विद्यमान अवस्थापना सुविधाओं तथा अन्य संसाधनों का काफी हद तक उपयोग करेंगी। अतिरिक्त सुविधाओं/उपस्कर स्थान तथा अतिरिक्त संकाय सदस्यों के लिये रा.शै.अ.प्र.पॉर. को इस योजना के अन्तर्गत दी गई दिनांशों में से गहन किया जाएगा।

## 13 अन्य स्टाफ का प्रशिक्षण :

स्वीकृत शिक्षा का सफलतापूर्वक कार्यान्वयन स्कूलों में प्रशासकों तथा सामान्य शिक्षकों की कुशलशीलता पर निर्भर करता है। योजना के कार्यान्वयन से संबंध प्रशासकों संस्थानों के प्रमुखों तथा सामान्य शिक्षकों के लिये अल्प अवस्थापना कार्यक्रम आयोजित किए जायेंगे। प्रशासकों/प्रमुख व्यक्तियों के लिये प्रशिक्षण कार्यक्रम रा.शै.अ.प्र.पॉर. द्वारा आयोजित किया जाएगा। राज्य सरकारें/संघशासित प्रशासक आर.सी.ई. तथा अंगों के लिये स्वीकृत शिक्षा योजना को कार्यान्वित करने वाले संस्थाओं के प्रमुख के लिये तीन दिन की अवधि तथा सामान्य शिक्षकों की लिये पाँच दिन की अवधि का अवस्थापना कार्यक्रम आयोजित कर सकते हैं। इन अवस्थापना कार्यक्रमों के लिये मासिक रा.शै.अ.प्र.पॉर. द्वारा किया जायेगा। भाग लेने वालों का यात्रा भत्ता/दैनिक भत्ता संबंधित राज्य सरकारों/संघशासित प्रशासकों द्वारा वहन किया जाएगा। संसाधन व्यक्तियों को भान देय तथा यात्रा भत्ता/दैनिक भत्ता

तथा आलोचक व्यव इन योजनाओं से सहन किया जाएगा। तीन दिवसीय अवस्थापना कार्यक्रम की अनुमानित लागत 3000/- रु. दिवसीय कार्यक्रम की लागत 4200/- रु. आती गई है।

#### 14 संसाधन - कल :

सभी अनौपचारिक उपस्कर, अध्ययन सहायक सामग्री वाले संसाधन कल सौंपित शिक्षा की योजना को कार्यान्वित कर वाले स्कूलों के समूहों को, दान दिया जाएगा रा. प्रौ. अ. प्र. गोर. ने स्व. गुरा का भी निदाती है जिससे संसाधन का दे दी गई सुविधाओं का उल्लेख किया गया है। निम्न अंगताओं के लिए अर्पित उपस्करों की सूची अनुबन्ध-2 में संलग्न है, ऐसे उपस्करों की अनुमानित लागत 30,000/- रु. है। उपस्कर का आवश्यकता सम्बन्ध स्कूलों में दाखल एक घर छात्रों की अंगता को निम्नता पर आधारित होगी। संसाधन का निम्न कर स्कूल के में ही निम्नता कमरे में खोला जाएगा। नवा कमरा केत जहाँ राज्य सरकार को संतुष्ट का आवास उपलब्ध न हो। ऐसे निम्नताओं में स्कूल में संसाधन कल के निर्माण के लिए अधिकतम 4000/- रु. तक का अनुमान दिया जाएगा।

#### 15. वास्तुकला आरोधों को दूर करना :

वास्तुकला आरोधों को दूर करने तथा निम्नता वास्तुकला सुविधाओं में संशोधन करना आवश्यक होगा ताकि स्कूल के अन्दर ही अंग चचे की पहुँच को आसान बनाया जा सके। इस कार्य के लिए ऐसे स्कूलों को अनुदान दिया जाएगा जहाँ कम से कम 10 अंग चचे दाखिल हों।

#### 16. शिक्षण सामग्री :

इस समय निम्न अंगता वाले चचे के लिए शिक्षण सामग्री को तैयार करने के लिए देश में पर्याप्त सुविधाएं निम्नता नहीं है। योजना के सफलतापूर्वक कार्यान्वयन के लिए अंगों के लिए अर्पित शिक्षण अध्ययन सामग्री को उपलब्धता बहुत जरूरी है। ऐसे सामग्री को आवश्यकता अस्वी अंग चचे को शामिल करने के साथ ही चैतने को संभावना है। अंगों के लिए शिक्षण सामग्री को खरीद। उत्पादन तथा इसके लिए अर्पित उपस्करों को खरीद के लिए इस योजना के अन्तर्गत वित्तीय सहायता दी जास्ति। जहाँ कहीं भी आवश्यक होगा, उपलब्ध सामग्री को क्षेत्रीय भाषाओं में अनुवाद दिया जाएगा अथवा तैयार किया जाएगा।

17. निम्नलिखित में छूट के तहत निम्नलिखित :

विशेषा पर अलग चर्चों की पहलु में सुधार लाने के तहत राज्य सरकारों/संघ शासित प्रशासनों तथा अन्य कार्यन्वित एजेंसियों को दाखिले, दाखिले के तहत कम से कम अथवा अधिक से अधिक आयुस्रोत/परिक्षा पद्धति आदि से संबंधित निम्नलिखित में छूट देने के तहत दाखिले के प्रावधान में सामान्यता पात्रता श्रेष्ठ: वर्षों के अलावा 8-9 वर्षों तक और आगे बढ़े ।

18. पूर्ण स्कूल तथा प्रारंभिक बाल देख-रेख शिक्षा :

अलग चर्चों की विशेषा के तहत तैयार करना अत्यंत आवश्यक होने की वजह से राज्य सरकारों द्वारा पूर्ण स्कूल तथा प्रारंभिक बाल देख-रेख शिक्षा की सुविधाएं तत्काल को जास्ती । बचन के आधार पर विद्यमान केन्द्रों को इस कार्य के तहत सुसाज्जित किया जास्ती ।

19. अनुदानों की प्रीकृति :

कार्यन्वित एजेंसियों को अपने कार्यक्रमों को तैयार करना चाहिए, अपने विवर्तीय अवस्थितियों का मूल्यांकन करना चाहिए तथा अगले विवर्तीय वर्ष के तहत अपने व्ययों के प्रस्तावों को मानव संसाधन विकास मंत्रालय, भारत सरकार द्वारा शिक्षा विभाग श्रेष्ठ प्रत्येक वर्ष दसम्बर के अन्त तक भेज देना चाहिए । प्रस्तावों में अनुवर्धन तीन में दस गैर श्रेष्ठ प्रपत्र में विभिन्न विषयों पर धूरी जानकारी देनी चाहिए । प्रस्तावों के साथ-साथ पिछले वर्ष मुक्त तहत गैर अनुदानों के सम्बन्ध में उपयोगिता प्रमाण-पत्र तथा पिछले वर्ष की कार्यन्वित रीपोर्ट भी भेजी जानी चाहिए जिसमें अन्य बातों के साथ-साथ शामिल तहत गैर क्षेत्र, शामिल तहत गैर शिक्षा प्रीशिक्षण कार्यक्रमों आदि को भी दर्शाया जाना चाहिए ।

प्रस्तावों में यह स्पष्ट रूप से बताया जाना चाहिए कि अलग चर्चों की विभिन्न भर्ती के सम्बन्ध में राज्य सरकारों की दरों को तैयार किया है अथवा किसी राज्य सरकारों के उपलब्ध न होने की वजह से इस योजना में दो गैर दरों को अपनाया गया है । तत्पश्चात् फरवरी के अन्त में कार्यन्वित एजेंसियों के प्रस्तावों को जांच को जास्ती तथा अनुमान अनुदान की पचास प्रतिशत राशि को पहली तहत कार्यन्वित एजेंसियों को उस विवर्तीय वर्ष की पहली तीमाही में स्वीकृत की जास्ती । ताकि योजना के सही तरह से कार्यन्वित के तहत निधीयों को कोई कमी न हो । बताया पचास प्रतिशत राशि कार्यन्वित एजेंसियों द्वारा पहले स्वीकृत तहत गैर अनुदान की कम से कम पचहत्तर प्रतिशत राशि की उपयोगिता की रीपोर्ट प्राप्त होने पर दे दी जास्ती । इस योजना को कार्यन्वित

करने के इच्छुक स्वायत्त संगठन अपे आवेदन पर संबंधित राज्य सरकारों/संघ शासित प्रशासनों के माध्यम से भेजें । 1987-88 के लिए राज्य सरकारों / संघ शासित प्रशासन अपने प्रस्ताव मंत्रालय को भेज सकते हैं तथा जी के लिए प्रस्तावों के प्राप्त होने के पश्चात् तीन सप्ताह के अन्दर पचास प्रतिशत स्वीकृत राशि दी जाएगी तथा बाँकी पचास प्रतिशत राशि तक दी जाएगी जब राज्य/संघ शासित प्रशासन पहले दी गई राशि का पचहत्तर प्रतिशत खर्च कर लेगा ।

20. मूल्यांकन तथा अनुश्रवण :

राज्य सरकारों/संघ शासित प्रशासन ग्रामिण-क्षेत्रों/स्कूलों में कार्यक्रम के समग्रती मूल्यांकन के लिए संस्थानों/ऐजेंसियों को बुन सकते हैं । ऐसे के मूल्यांकन अध्ययन की लागत को योजना के अन्तर्गत राज्य सरकारों को प्रतिपूर्ति करेगा । केन्द्रीय सरकार योजना अधीन के अन्त में रा. प्रौ. अ. प्र. पोर. अधीन अन्य संस्थाओं के माध्यम से योजना के कार्यान्वयन का तीक्ष्ण मूल्यांकन करेगी ।

रा. प्रौ. अ. प्र. पोर. की एक प्रति सीहत प्रपत्र 1-11 में मानव संसाधन विकास मंत्रालय अधीन विभाग को एक त्रिमासी प्रगत रिपोर्ट भी भेजेगा ।

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## Orientation programme organised

By A Staff Reporter

PATNA, February 15. An "orientation programme for IED teachers for the state of Bihar" was organised at Patna Collegiate School here by the Regional College of Education, Bhubaneswar in collaboration with the State Council of Educational Research and Training, Patna between February 10 and 14.

The programme was attended by 42 participants from all over the state covered five areas of disabilities: mental retardation, learning disability, orthopaedic disability, speech and hearing disorders and visual handicap. Besides, lectures, demonstration classes, video films and slides presentation were also arranged.

Dr S.K. Goel, reader in special education of RCE was the programme director whereas Mrs Zaccarat Ara of SCERT was the programme coordinator. Mr K.M. Chaudhary, principal of the school inaugurated the programme whereas Mr B.L. Baisantry, director, SCERT, gave the valedictory address.